Perceptions of Draft and Existing Chlamydia Educational Materials: Final Report from Focus Groups with Females Ages 15–25

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# I. Executive Summary

Over 1.2 million chlamydia (CT) infections were reported to the Centers for Disease Control and Prevention (CDC) in 2008. Frequently it is asymptomatic, which facilitates transmission between sex partners. CT can cause serious problems in women if left untreated, including pelvic inflammatory disease and infertility. CDC currently recommends that all sexually active women ages 25 years and younger be screened annually for CT. This recommendation reflects the high incidence of CT in this population. According to CDC's 2008 Surveillance Report, rates of CT were almost three times higher among women than among men, with the heaviest burden among women ages 15 to 24 years of age. Yet despite these recommendations, screening is largely missing its target population; the average age of a woman being screened for CT is 28.9 years.

The Centers for Disease Control and Prevention (CDC), Division of Sexually Transmitted Diseases (STD) Prevention commissioned a series of focus groups with teenage and young adult females (ages 15–25) to discuss issues related to CT and CT screening. Specifically, the purpose of this formative research study was to inform the development of a CT-related infertility prevention communication campaign.

Two research activities, a literature review and exploratory research, and two health communication/public health theories, Health Belief Model and Theory of Planned Behavior, have guided the research and materials development processes.

## A. Methodology

This study included three segments of females ages 15–25. CDC is targeting 15–25 year-olds because these individuals have the highest incidence of CT. The three segments of participants are as follows:

- Females aged 15–17 (teenagers)
- Females aged 18–25 who attend school (young adult students)
- Females aged 18–25 who work (working young adults)

A total of 18 focus groups were conducted in four cities across the United States (Atlanta, GA; Alexandria, VA; Chicago, IL; and Dallas, TX). One dyad was conducted in Alexandria, VA. Participants were recruited by market research firms in these locations.

All focus groups were conducted in professional focus group facilities. The moderators used a semi-structured moderator's guide to briefly discuss participants' existing knowledge and awareness of CT and gain in-depth feedback about draft and existing educational materials. Focus groups were designed to solicit feedback about the design (i.e., visual elements and layout), concept (i.e., general idea), and approach (i.e., tone and feel) of educational materials and products. Products included six poster concepts; six calls to action; 13 logos; three types of information about CT (i.e., basic information, details about talking to one's doctor, details about talking to one's partner); and nine public service announcements. All materials except four logos and all of the public service announcements were developed specifically for this research.

## B. Major Findings

## Chlamydia Knowledge & Sources of Knowledge

Most participants identified CT as an STD, but few knew much more about the topic. Some knew that CT was curable, that it did not always have symptoms, or that it could lead to infertility. School or health class, health care providers, and television were sources of information about CT.

## **Poster Concepts**

Participants provided feedback on six poster concepts that were developed to empower women; diminish barriers to CT testing by overcoming stigma and emphasizing ease of testing; and emphasize women's health and infertility in relation to broader aspirations.

The woman you want to be was the most preferred poster overall. It was preferred in terms of message and design because it made participants think about their future and how their decisions can make an impact on their life. Others liked that it had a positive message—that there are some negative health impacts from CT that could be prevented through testing and treatment. This concept was considered empowering.

The *Café* poster was the second most preferred poster. Participants appreciated how the message and visual display suggested that people are not alone—that everyone, across races/ethnicities, ages, and socioeconomic classes is at risk for STDs and should be tested. The concept resonated with some participants because they could relate to the situation.

Scan your hardware tested well with teenage (15–17-year-old) participants. They appreciated the humorous analogy and attention getting nature of the poster and considered it relevant to their lives. Some in the young adult (18–25-year-old) segment stated that humorous messages like this one do not take the issue of STDs seriously. Other young adult participants did not like the comparison of a human body to something mechanical or replaceable like a computer.

The *Confidence* poster was met with mixed feedback. Many participants did not like the visual execution, but did appreciate the empowering message. There was some confusion over the connection between the "confidence" theme and CT. Many liked how the message referenced that a woman should be confident, but did not consider the featured model to be confident.

The *Library* poster was disliked by many participants. The intended message was to reduce stigma and suggest that your peers do not need to know if you get tested for STDS. However, it was interpreted as meaning that others would not think it is important or appreciate that someone gets tested. Although the message was intended to reduce stigma, the imagery suggested that people who need testing or have been tested should be isolated.

The *Lots of things* poster was considered inappropriate because it featured a urine sample and included a message that was perceived to stereotype women.

## **Poster Approaches**

Participants were split on whether the materials should focus on STDs, CT, or a combination of both, but leaned toward CT-specific or mixed STD and CT materials. Compared to STDs, CT was considered a "newer" topic than STDs that had an undesirable outcome (i.e., infertility). The inclusion of "STD" would ensure that individuals knew that CT is an STD.

Participants were interested in campaign materials that featured men as well as women. A few participants pointed out that excluding men suggests that only women get CT or that it is not a man's responsibility to be screened for STDs.

Participants across segments were interested in attention-getting, relevant concepts that used fear appeals (i.e., compelling information about the prevalence of CT, its ease of transmission, and possible consequences), yet gave women a simple, actionable step to take. Young adult participants viewed the use of humor less positively than those in the teenage segment.

#### Call to Action

Three of the calls to action were the most popular across groups: Get informed. Get tested. Get on with your life.; No symptoms is no excuse. Get tested.; and Testing is easy. Knowing is everything.

### **Poster Content**

Participants wanted minimal, but direct, straight-forward and factual content on the posters. Some were interested in additional details about CT, which could be provided through a website or other support materials.

Participants provided negative feedback on poster content and calls to action that suggested that STDs and STD testing should not be taken seriously. Phrases like "no big deal," "get on with your life," or "don't stress" were disliked by many participants.

### Poster Sources, Channels, and Formats

Participants reported that materials should come from CDC, "a health organization," and "school." A few participants suggested that women should design the materials. The poster content could be used in magazine advertisements, posters, television commercials, and radio announcements.

#### Logo Designs

Participants preferred logos with straightforward text and relevant images. The top-rated logo was "Get tested" because of its simple message and the stick figures, which conveyed intimacy; though some felt the hearts did not apply to all contexts in which STDs are transmitted. The "Get checked" logo was also popular because it was easily linked with STD testing, but it was considered similar to existing logos (e.g., "Click-it or Ticket," Nike). The phrases "Knowing is everything" and "I know" resonated well with participants. Although some felt the connection of these phrases to an STD testing campaign was not inherently clear, they appreciated how these phrases could be used in a campaign. Some participants recognized the "GYT" logo, and they liked it more than the participants who had never seen it before. The GYT logo with the acronym

spelled out was received more positively than the same logo without the phrase. The groups did not like vague text or phrases. "Get over it," "Scan it," "Think. Act. Be.," and "It's all you" were unpopular across all racial/ethnic groups and age groups.

#### **Brochure/Fact Sheet Content**

Participants remarked that the content in each of the three versions was clear and easy to read. Similar to poster content, participants preferred content that takes STDs and STD testing seriously. Across versions, participants requested that information about CT in same-sex relationships be included.

The "basic" CT information was viewed favorably. It provided answers to many participants' questions, but left unanswered questions about how CT affects men, how an individual can experience symptoms if already treated for CT, how CT makes it easier to get HIV, and what it means to use condoms the "right way." Many thought the information about oral sex was vague and uncertain, making it seem unreliable. Some were offended by the use of informal language in the content and the inclusion of a statement that promotes abstinence.

Participants were mixed on their opinions of the "talking to your doctor" content. They liked the content about CT testing but were mixed about the other sections. Young adult participants felt that much of the information was not relevant to them. Teenage participants viewed the information more positively. Participants felt that there was repetition in the information that could be eliminated. Some were confused by the detailed description of those individuals who need to be tested for CT. Many felt that the tips section could be shortened while also providing more actionable tips.

Perceptions were split by age on the content about speaking with one's partner. Teenage participants were generally positive about the content, while the young adults thought it was unnecessary because it addressed personal and psychological issues that they could handle on their own. Participants liked the information about ways that CT is transmitted.

Participants would expect to receive this information from health care providers' offices, schools, non-profit organizations, CDC, and the National Institutes of Health (NIH). They would like to receive the information in informational sheets, brochures, television announcements, newspapers, and Web content.

#### **Public Service Announcements**

Participants reviewed nine public service announcements from existing and past campaigns about STDs and STD testing. Participants liked the use of videos that referenced men's roles in relationships and STD testing/prevention or depicted intimate relationships represented a diversity of individuals, including those who looked like them; conveyed relatable friendships or real-life conversations between friends included specific information about STDs and presented relatable situations.

Findings suggest the need to strategically consider the tone and length of PSAs for a topic such as STDs, as well as the use of celebrities. The inclusion of celebrities elicited mixed reactions, but leaned toward negative. While celebrities effectively caught the audience's attention, the message was not necessarily retained. Participants suggested that a PSA could lose credibility if viewers do not think the celebrity is appropriate for the topic. Participants did not like announcements that are short (under 20 seconds) or include fast speaking. Participants did not like the use of humor that does not take the issue of STDs seriously.

## **Online Testing**

Participants who were asked about ordering an online screening test were supportive but had concerns about confidentiality, reliability, and waiting period for results.

#### **Website Features**

Participants provided a number of suggestions for features that could be included on a CT website. These features included a tool that helps identify a local clinic, frequently asked questions (FAQs), personal testimonies, blogs, interviews, chat rooms, quizzes, polls, inspirational quotes, public service announcements/videos, opportunities to chat with or submit a question to a health professional, a hotline to contact for more information, and pictures of genitalia infected with CT. Participants were not interested in seeing games on the website. Content should include CT prevention, symptoms, treatment, and statistics; tips for communicating with a doctor or partner; and detailed information about how CT affects one's body.

## C. Implications for Communications

The research demonstrates that the project can develop concepts, content, and images that appeal universally to the different priority audiences, especially if they feature diverse races/ethnicities, ages, and lifestyles or stages among the models. Age appeared to be the strongest determinant of audience preference for concepts and messaging, but some materials were found to appeal to both teenage and young adult participants. Materials should consider using inspirational/empowering or light-hearted approaches. Design elements should include the use of bright colors, familiar (relatable) and social situations/settings, and diverse models. Two concepts, one that used emotional appeals that tapped into young women's deeper values and

aspirations, and another that framed testing as a normative behavior, should be considered for the campaign.

Although participants did not have much preexisting knowledge of CT, they took the issue seriously. Materials should not suggest that STDs are something that people should just "deal with" and "move on." The materials should present the issue with straightforward information. Information should be definitive, easy to read, and actionable. Specific details about CT, including symptoms, consequences, testing, and alarming prevalence statistics, should be included to gain audience attention and increase knowledge and perceived relevance. While some groups suggested the use of fear appeals to capture attention, this approach may further stigmatize the issue; turn audiences off and have a boomerang effect. Moreover, fear appeals that highlight or exaggerate the visual symptoms of CT would only perpetuate the misperception that "you would know if you or someone else had an STD." That said, the use of attention-getting statistics and information about CT's potential to cause infertility may be effective, if accompanied by simple and actionable steps that audiences can take to prevent this consequence.

Language for materials should be chosen with care to prevent being condescending and offensive. Effort should also be made to include information about males, since young women may feel stigmatized by, or defensive about a focus on women for an STD that affects both males and females. Participants were particularly sensitive to language recommending that women (but not men) need STD testing, which promotes a double-standard and was interpreted to mean that women who have sex are promiscuous.

Participants had mixed feelings both about the focus of the campaign on "STDs" versus "chlamydia," and on the targets being "women only" versus "both men and women." These may be issues that CDC considers with its partners, based on public health priorities and the media and healthcare environments. If messaging does focus on CT and women, it should emphasize infertility and also acknowledge men (such as their role as supportive partners). On the other hand, it may be possible to promote CT screening among young women using more general messaging, if the selection of messages, channels, settings, models, etc. is strategically approached.

## II. Introduction

Over 1.2 million Chlamydia (CT) infections were reported to the Centers for Disease Control and Prevention (CDC) in 2008. Frequently it is asymptomatic, which facilitates transmission between sex partners. CT can cause serious problems in women if left untreated, including pelvic inflammatory disease and infertility. CDC currently recommends that all sexually active women ages 25 years and younger be screened annually for CT. This recommendation reflects the high incidence of CT in this population. According to CDC's 2008 Surveillance Report, rates of CT were almost three times higher among women than among men, with the heaviest burden among women ages 15 to 24 years of age. Yet despite these recommendations, screening is largely missing its target population; the average age of a woman being screened for CT is 28.9 years.

The Centers for Disease Control and Prevention (CDC), Division of Sexually Transmitted Diseases (STD) Prevention commissioned a series of focus groups with teenage and young adult females (ages 15–25) to discuss issues related to CT and CT screening. Specifically, the purpose of this formative research study was to inform the development of a CT-related infertility prevention communication campaign. This report details results from 18 focus groups with sexually active females aged 15-25 in Atlanta, GA; Alexandria, VA; Chicago, IL; and Dallas, TX. Data from a dyad in Alexandria, VA is also included in this report. The focus groups explored knowledge of chlamydia, existing and draft STD/CT educational materials/products, and formats and sources of STD/CT information. Focus groups were designed to elicit feedback about the design (i.e., visual elements and layout), concept (i.e., general idea), and approach (i.e., tone and feel) of educational materials and products. In addition to general feedback, participants were asked to complete several activities to guide the discussion and to enhance the feedback given.

### A. Guidance from Earlier Research Activities

Two research activities, a literature review and exploratory research, have guided the research and materials development processes. The literature review included published and gray literature from 2002–2007. The review aimed to understand the factors that contribute to CT screening. Ethnographic exploratory research was also conducted. A total of 125 interviews were conducted with sexually active women ages 25 years and younger. The young women recruited for the interviews represented different lifestyles (attending school or not attending school/working), and races/ethnicities. The major topics discussed were: knowledge, attitudes, and behaviors regarding STD screening, with a focus on CT screening; perceptions of sex, STDs,

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<sup>&</sup>lt;sup>1</sup> Centers for Disease Control and Prevention (2009). *Sexually Transmitted Disease Surveillance, 2008*. Atlanta, GA: U.S. Department of Health and Human Services.

<sup>&</sup>lt;sup>2</sup> Centers for Disease Control and Prevention (2006). Sexually Transmitted Diseases Treatment Guidelines. *Morbidity and Mortality Weekly*; 55(RR-11): 1-94.

<sup>&</sup>lt;sup>3</sup> American Social Health Association. (2006). New data indicates few young Americans tested for common STD. Press release, March 28, 2006. Available at <a href="http://www.ashastd.org/news/news\_pressreleases\_GetTested.cfm">http://www.ashastd.org/news/news\_pressreleases\_GetTested.cfm</a>. [Accessed June 26, 2008].

and STD testing; STD-related communication with friends, family members, health care providers, and sex partners; preferences for STD information, STD testing venues, and testing results delivery; reactions to CT information; knowledge of routine health and women's health visits; and ideas for concepts and images for communication about CT. These activities have provided many insights that were used to guide the development of the research design and materials for testing. Findings from the literature review and exploratory research have guided the research and materials development process. Major findings are listed below.

### Awareness and Concern for Chlamydia

Teen and young adult women who participated in the exploratory research are not very knowledgeable about STDs and STD screening. Their greatest health- and sex-related concern is pregnancy. They cluster STDs into categories of curable and incurable diseases/infections. Most do not have substantial knowledge about CT, except from perceiving it as being curable. Most do not connect STDs with fertility problems. Many believe that the Pap test screens for STDs and none are aware of a urine test for chlamydia.

### **Barriers to Testing**

Fear is the strongest barrier to STD testing. Individuals fear getting test results, testing positive, and parents becoming aware of their sexual activity or STD status. Other barriers to testing include: confidentiality concerns/peer stigma, access issues, embarrassment, testing procedure concerns, lack of symptoms or perceived susceptibility, sex partner issues, or beliefs that it is a routine part of a health visit.

## **Benefits to Testing**

Knowing one's STD status, confirming one's negative status, or being able to take action if the testing revealed that one has an STD are considered the benefits of testing.

#### Who Women Talk to about STDs

STDs are not a normal part of teen and young adult conversations. Some are comfortable talking with their friends, while fewer are comfortable talking with family members. Of family members, mothers and sisters are the most likely to be consulted or to be considered for consultation if a young woman is concerned about an STD. Although most say that they would not stigmatize friends if they were to contract an STD, the research findings suggest that they perceive that having an STD or needing to have an STD test demonstrates poor judgment. Most teens and young adults report that they would talk to their partner prior to testing if they were to get tested, even if uncomfortable doing so. Some, however, express concern over their partner's potential reactions (e.g., suspicion, mistrust), and the negative consequences that might ensue. Many have never talked about STDs with a health care provider and are too embarrassed to bring up the topic.

#### **Sources for Information**

Health care providers, especially young, female health care providers, are the preferred source of STD information. The Internet and television PSAs are other potential sources of STD information.

### **Motivating Information**

The exploratory research suggests that some information is more likely to motivate teens and young adults to get tested for CT. This includes:

- that CT is frequently asymptomatic and could lead to infertility;
- that you can get CT from a regular sex partner or boyfriend;
- that CT is easily diagnosed and treated;
- that a simple urine test is available; and
- that confidential testing is available.

The research also suggests that motivating messages could include empowering and supportive information or address embarrassment and stigma associated with STDs and STD testing. Messages with alliteration and repetition are preferred.

## B. Theoretical Foundation

In addition to being based in consumer research, the drafted campaign concepts and messaging have also been guided by two health communication/ public health theories: the *Health Belief Model*<sup>4</sup> (HBM) and the *Theory of Planned Behavior*<sup>5</sup> (TPB).

#### **Health Belief Model**

The Health Belief Model posits that a number of constructs influence behavior. The Model suggests that how an individual perceives a potential health threat (*perceived susceptibility*, *perceived severity*) and the benefits and barriers of taking a proposed action to reduce a health threat (*perceived benefits*, *perceived barriers*) affect an individual's desire to act. If a person is ready to take the proposed action, *cues to action* encourage movement. An individual will take the action if they have the *self-efficacy* or confidence that they can complete the action.

### Theory of Planned Behavior

The Theory of Planned Behavior posits that three constructs influence behavioral intentions and behavior. These constructs are *attitudes toward the behavior* (i.e., perception of the behavior), *subjective norms* (i.e., perception of what others think about the behavior), and *perceived behavioral control* (i.e., belief that one could complete the behavior).

The table below depicts key constructs from each theory, and how each explains CT screening behavior and predicts possible communication and marketing approaches.

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<sup>&</sup>lt;sup>4</sup> Glanz, K., Rimer B. K., National Cancer Institute. (2005). Theory at a glance: a guide for health promotion and practice (Second Edition). Bethesda, MD. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Cancer Institute. NIH Publication no. 97-3896 pp. 13-15.

<sup>&</sup>lt;sup>5</sup> Glanz, K., Rimer B. K., National Cancer Institute. (2005). Theory at a glance: a guide for health promotion and practice (Second Edition). Bethesda, MD. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Cancer Institute. NIH Publication no. 97-3896 pp. 16-18.

Table 1. Health Belief Model and Theory of Planned Behavior Constructs Associated with Chlamydia Screening Behaviors of 15–25 Year Old Females

HBM/TPB Construct	Associations with Chlamydia Screening Behavior	Relevant Research Findings*	Possible Approach			
HBM—Perceived Susceptibility Does a young woman think she is at risk?		Females do not think they are at risk because:  their sex partner is "clean,"  CT is frequently asymptomatic, and they do know of high CT prevalence	Remind women that CT is relatively common, asymptomatic, and may result in infertility. Testimonials about ordinary people with STDs/CT.			
HBM—Perceived Severity	Does a young woman think there are serious implications from having CT?	<ul> <li>Females do not know that having CT can lead to PID and infertility</li> <li>Females are more concerned with pregnancy, HIV, and other "non-curable" STDs</li> </ul>	Everybody is at risk.			
HBM—Perceived Benefits TPB—Attitude	Does a young woman consider screening for CT to be beneficial?	<ul> <li>Some are unaware that CT is curable and therefore do not see benefit of testing</li> <li>Others believe there is benefit in the peace of mind from knowing what is going on with their body and taking care of any problems</li> </ul>	Remind women that they are in charge of their health, their bodies, and their future. The support they need to take control of STD/CT treatment is out there and easy to access.  Either test result is good news: negative means everything is OK, positive means that you know what you are dealing with and can take the appropriate steps to get OK. Acknowledge that women should know their status. Appeal to responsibility and doing the right thing for your health and future.			
HBM—Perceived Barriers TPB—Attitude	What does a young woman perceive to be the drawbacks or barriers to screening?	<ul> <li>Many have concerns about:</li> <li>Logistics of arranging and paying for a test</li> <li>Fear of testing, getting test results, testing positive, parents becoming aware of their sexual activity or STD status, being diagnosed for an STD with no cure or treatment, having something that can be passed on to children</li> </ul>	Acknowledge barriers and fears and establish trust of campaign. Reassure women that their health, their body, and their future are in their hands. They have the power to get the information to not succumb to other people's misperceptions. Remind women that testing is confidential and free.			

		<ul> <li>Stigma related to having an STD or admitting that you may be at risk for one</li> <li>Perception or reality that sex partner disapproves of testing</li> <li>Privacy and confidentiality concerns (related to the visit and payment)</li> <li>Embarrassment around talking about STDs or acknowledging that they need a test</li> <li>Discomfort associated with the actual test</li> </ul>	
TPB—Subjective Norms	What are the opinions and behaviors of others of influence? (e.g., friends, sex partners, peers, family)	<ul> <li>STD testing is associated with stigma</li> <li>STD testing is not considered routine;</li> <li>STDs and needing STD testing are considered to be the result of promiscuous or irresponsible behavior</li> </ul>	De-stigmatize STD conversations (with friends, sex partners and providers). Insert reminders in media regularly used by young women Influence social norms with respect to talking about STDs and testing.
HBM—Cues to Action	Is CT testing on a young woman's radar?	CT and STD testing is not on their radar Providers are not ensuring that CT screening is performed as recommended	Educate that only need to have sex once to get an STD, can get an STD while in a committed relationship if one partner came to the relationship with an STD.
HBM—Self- efficacy TPB—Perceived Behavioral Control	Does a young woman feel capable of getting screened?	Many young women do not know: how to find a testing site; how to initiate conversation with a provider; how test is conducted	Provide tools and resources that help women find a STD testing provider that is sensitive to their concerns about privacy, payment issues, and discomfort discussing STD testing.  Provide tools to young women to facilitate a productive patient-provider interaction.  Remind women that STD/CT testing is not already automatically a part of their annual exam and they should request it.

<sup>\*</sup>Findings from exploratory research with 15–25 year old females

Findings from the exploratory research and guidance from HBM and TPB were used to guide the development of new products and selection of existing products to be used for testing. See Appendix A for a summary of the materials (i.e., poster concepts, logo concepts, content, and public service announcements) developed and chosen to reflect the research findings and theory constructs.

# III. Methodology

## A. Participants

The present study included three segments of females ages 15–25. CDC is targeting 15–25-year-olds because these individuals have the highest incidence of CT. The three segments of participants are as follows:

- Females aged 15–17 (teenagers)
- Females aged 18–25 who attend school (young adult students)
- Females aged 18–25 who work (working young adults)

All participants identified themselves as African American, Caucasian, or Latina, and were fluent in English. Additionally, in order to be eligible to participate, respondents must have reported seeking reproductive health services (i.e., birth control or pelvic exam/Pap test) or having had sexual intercourse.

A total of 18 focus groups were conducted in four cities across the United States (Atlanta, GA; Alexandria, VA; Chicago, IL; and Dallas, TX). One dyad was conducted in Alexandria, VA. Participants were recruited by market research firms in these locations.

## B. Consent

Verbal consent or assent was obtained from all participants. For participants in the young adult (18–25-year olds) segments, consent was obtained directly from the participants during screening. Among the teenage (15–17-year olds) segment, parental consent was first obtained from a parent or legal guardian; verbal assent was subsequently obtained from participants during their screening.

### C. Products and Procedures

All focus groups were conducted in professional focus group facilities. The moderators used a semi-structured moderator's guide to briefly discuss participants' existing knowledge and awareness of CT and gain in-depth feedback about draft and existing educational materials (see moderator's guide in Appendix B). A summary of the materials tested and activities conducted is included below.

**Poster concepts.** A total of six poster concepts were developed for testing to promote Chlamydia screening by (1) diminishing identified barriers (stigma, fear/testing procedures); (2) emphasizing female empowerment; and (3) emphasizing women's health and infertility in relation to women's future aspirations (see Appendix C). The posters were reviewed one at a time by the participants, who were presented with a laminated color version of the poster and a sheet of paper that contained the poster content. They were asked to review the images, colors, and content. Participants noted content that they "liked" and "did not like." The groups discussed the relevance of each poster to the audience and, when appropriate, the participants were asked

to describe ways to make the posters more relevant to them. While reviewing the posters, participants were asked where they would expect to find materials like these and who they would expect to be the source or channel for the materials. Each poster was discussed and, following review of individual posters, participants were asked to rank them from their favorite to least favorite. Not all participants ranked the posters as per the directions; some chose multiple favorites or did not include any favorites. As saturation was reached, posters that were consistently disliked across segments were eliminated from the sample of tested material. This allowed for more in-depth discussions of the concepts that were resonating more strongly.

**Calls to action.** Participants were asked to review six calls to action (see Appendix D). The calls to action included three that tested well during the exploratory research and three additional calls to action. Participants were asked to note content that they liked and disliked, and star their favorite. Although participants were given these directions, they were not followed by all participants. Some starred multiple options as their favorite, while others did not star any favorites.

**Logos.** Participants were asked to review 11 to 13 logos to represent the campaign (see Appendix E). Each participant received a color 11x14 sheet that displayed all of the logos. Participants were instructed to review each of the logos as completed products and/or separated words and pictures. They were asked to note content that they liked or disliked, and star their favorite. As with other activities, participants did not always follow the directions as hey were explained. After completing the activity, the group discussed the logos. They were also asked if they had ever seen any of the logos before and engaged in discussion about their preferences.

**Brochure/Factsheet content.** Participants were asked to review one of three different versions of content about CT (see Appendix F). Each version was two pages in length. One version, *Basic*, provided general information about CT. It included details about symptoms and transmission. The second version, *Testing*, provided details about how to get screened for CT and how to bring the topic up with a doctor. This sheet included tips on talking to one's provider. The third version, *Partner*, included details about talking about STDs, STD testing, and tips of what to say to your partner if you have CT. Participants were informed that the content they were reviewing was intended to be part of a larger publication, and that they were just reviewing one section. They were asked to underline phrases or sentences they thought were important, circle things that were not clear or that they did not understand, cross out things that should be deleted, and put an exclamation mark (!) by anything they found offensive or inappropriate. After discussing the content, participants were asked where they would expect to find this information.

**Public Service Announcements.** Participants were shown four to seven different existing public service announcements (PSA). Each PSA was from an existing or past campaign that related to STDs and STD testing. A total of nine PSAs were reviewed across the groups.

Participants were asked to discuss each of the PSAs and the approach taken by each version.

All focus groups were observed by a minimum of one observer/note-taker and up to six observers. After each focus group, observers and note-takers provided feedback to moderators and debriefed on findings.

## D. Analysis

All interviews were recorded using a digital or tape recorder; recordings were transcribed for records. All recordings were assigned a unique identifier for the purposes of tracking and analysis. Posters, poster ranking sheets, poster body copy sheets, call to action sheets, brochures, and logo sheets were collected after each focus group for analysis.

One coder analyzed the data using NVivo 2 software (QSR International) for organization and analysis of transcripts. After all the focus group transcripts were coded, analysis commenced by reviewing the NVivo database for feedback on the different educational materials. Analysis was also conducted by participant segment (e.g., age group, ethnic/racial groups, location, or school/work status for adult women). Data were shared with focus group moderators, observers, and note-takers to allow for a comparison of findings and development of consensus.

In addition to the qualitative analysis, poster preferences and call to action preferences were tabulated to help verify the most popular choices for the various segments.

## **IV. Limitations**

Findings from qualitative analysis are rich in details, but limited to the groups sampled. This study did not aim to involve a statistically representative sample of young women meeting the participant profile, so the results cannot be said to be "generalizable" to all young women. That said, this research was intended to be directional in nature, informing next steps (product development) in CDC's campaign.

Additionally, participants self-selected to be included in the research, and knew that STDs were the topic of the interviews, so they may reflect a group of young women who are more willing than the general population to take part in a research discussion about sexual health and STDs. Challenges were experienced during the recruitment of minors and as a result findings represent those minors who are more open to admitting sexual behavior, and willing to speak about sexual health. Further, participants, especially teenagers, may have been inhibited from giving their honest responses as a result of peer pressure and social desirability bias.

Although a number of written activities were completed, these activities may be of limited value given that participants did not consistently follow directions.

# V. Summary of Findings

A total of 18 focus groups and one dyad were conducted. Table 2 displays a distribution of segments by location.

Table 2. Distribution of Participant Segments by Location

	African America n 15–17	African America n 18–25 School	African America n 18–25 Working	Caucasia n 15–17	Caucasia n 18–25 School	Caucasia n 18–25 Working	Latin a 15– 17	Latina 18–25 Schoo	Latina 18–25 Workin g	Total
Alexandria, VA	1	1		(1)		1			1	4+(1)
Atlanta, GA	1	1		1		1			1	5
Chicago, IL	1		1	2	1		1	1		7
Dallas, TX							2			2
Total	3	2	1	3+(1)	1	2	3	1	2	18 + (1)

<sup>(1)</sup> Denotes dyad

A summary of participant details across all focus groups can be found below.

Table 3. Participant Specifics

Category	Number	Percentage						
Age								
15–17	66	54%						
18–25	56	46%						
Race								
African American	40	33%						
Latina	44	36%						
Caucasian	38	31%						
Last Doctor Visit								
Last 6 Months	77	63%						
Last Year	35	29%						
Between 1 and 2 Years	10	8%						
City								
Atlanta	28	23%						
Alexandria	26	21%						
Dallas	15	12%						
Chicago	53	43%						
Parent Income (Minor Only)								
<\$15,000	4	6%						
\$15,000 - \$29,999	15	23%						
\$30,000 – \$44,999	6	9%						
\$45,000 – \$59,999	14	21%						
\$60,000 - \$74,999	6	9%						
\$75,000+	21	32%						
School Status (Minor Only)								
Yes	64	97%						
No	2	3%						
School Status (Adult Only)								
Yes	24	43%						
No	32	57%						
Work Status (Adult Working Only)								
Full Time	20	63%						
Part Time	12	38%						
Live With Parent (Adult Only)								
Yes	40	71%						
No	16	29%						

# A. Chlamydia Knowledge & Sources of Knowledge

When asked what they knew about CT, most of the respondents identified it as an STD; this was the most common initial response across all race/ethnicity and age segments. Several respondents knew that CT was curable, and that having CT might cause infertility or problems having children. African American respondents mentioned infertility more than Latinas and Caucasians. When compared to African American and Caucasian respondents, Latina respondents mentioned curability and infertility the least. Latina respondents also responded that they did not know much about CT more frequently than any other race/ethnicity segment.

"I guess I don't really know that much about it in detail, so I guess I just think of sexually transmitted disease in general."

- Caucasian, 18–25, School

"It's an STD. It's bad. It's curable. It's a silent disease per se."

- African American, 18–25, School

"It can prevent you from having kids earlier or later in life."

- Caucasian, 15–17

"Not much. Isn't that like the clap or something isn't it, yeah? I think so. I don't know."

- Latina, 18–25, Work

"I heard that really the symptoms are not shown like you don't know if you have it because all the symptoms, they don't show on some people."

- Latina, 15–17

Few respondents associated CT with symptoms that are hard to detect. Some Caucasian respondents referred to CT as "dirty," "nasty," or "scary."

"Some of the symptoms are hard to trace. A lot of people go unknown. They go about their everyday life unknowingly that they have this STD."

- African American, 18–25, Work

"It's dirty, you think so dirty."

- Caucasian, 15–17

"I think scary."

- Caucasian, 18–25, School

Most respondents referred to school or health class when they were asked where they learned about CT. School, specifically health class, was the most common response across all age and race/ethnicity segments. Some respondents mentioned learning about CT from their doctor or from television. Teenage respondents mentioned television more than the other age segment. A small number of individuals mentioned magazines, computer/Internet, or family when asked about where they learned about CT.

"Like in sex-ed or something, health class. Like eighth grade or something ..."

- African American, 18–25, School

"I don't know. School maybe."

- Latina, 18–25, Work

"School. Doctor's office, they have those pamphlets when you're bored and waiting."

- Caucasian, 18–25, School

"Commercials probably, like the ones 'Why do you think?' commercials, that kind of stuff. It's like ads basically of why do you think this many people have sexually transmitted diseases. They give you statistics on what they've come up with. What the reasons are."

- Caucasian, 15–17

When asked what they thought other women their age knew about CT, most respondents thought they knew the same or less information as them.

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"The same thing. Nothing."
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- Latina, 18–25, School

"Nothing."

- African American, 18–25, School

# B. Poster Concepts

The poster research findings are guided by qualitative reports received during focus group discussions. Participants were also asked to provide quantitative data in the form of ranking sheets. The findings below are based on the qualitative findings, but echo the findings of the quantitative data.

A total of six poster concepts were tested in focus groups. After the first ten groups, the *Lots of things* poster was removed from the research sample. After the 13<sup>th</sup> group, the *Library* poster was removed from review. Overall, *The woman you want to be* was the most preferred poster and the *Café* poster was the second most preferred poster. Although *The woman you want to be* was the most preferred poster overall, working young adult women and African American participants preferred the *Café* poster.

## 1) Designs

### The woman you want to be

The woman you want to be features sixteen boxes that show a timeline in a woman's life starting with childhood and ending with marriage and a child (motherhood). The pictures are interspersed with brightly colored boxes that state "Make sure the woman that you become is the woman you want to be." The body copy pointed out that CT can cause infertility, but highlighted that it is not

too late to get screened, treated and cured. The message was intended to empower women by emphasizing that there are small steps you can take to prevent CT from getting in the way of your future.

Concept. This concept was preferred for its message and design. Participants from all groups thought highly of this poster concept with the exception of two adult groups, both in Atlanta, one Latina working and the other African American in school. Participants liked this concept because it made them think about their future and how their decisions can make an impact on their life. The poster suggested that not knowing that they have CT could prevent them from having the life they would like to lead. Others liked that it had a positive message—that there are some negative health impacts from CT that could be prevented through testing and treatment. This concept was considered empowering. This poster was considered relevant and realistic across because most women think about their future. The poster was considered an ideal that all women could relate to, and want for themselves, regardless of race/ethnicity, age, income, and sexual orientation.

"What really jumped out at me was make sure the woman that you become is the woman you want to be. The things you do now can have a big impact on your life. What you do in your life can determine what path you go on. It can affect you too, so I totally agree. I like this one the best."

- Caucasian, 18–25, Work

"It was that baby sentence that jumped out at me really because I know some people don't wanna have kids and some people aren't able to have children. That would be important to me because what would he think of me if I won't have kids."

- Caucasian, 18–25, Work

"I like that it's going for the future. It's not just, get tested because you're gonna be sick, but because there can be consequences down the road that you might, maybe you're not thinking about having kids now but one day maybe you will be, and if you don't get tested now, you could not really have kids."

- Caucasian, 18-25, School

The two groups that did not like the concept felt that it was not the path that every woman follows or would want to follow, specifically the photos depicting graduating from college, getting married, and having a baby. However, some of the participants in these groups considered it the American dream, the dream that they want. As these two groups were conducted in Atlanta, GA, the first city where focus groups were conducted, this idea was explored in additional groups. Some participants expressed that this concept does not say that you need to follow the featured path, but become "the woman you want to be." They suggested that women have a choice in which path they follow. Further, others stated that those who have not followed the path (e.g., those pregnant before graduating) could still identify with the timeline presented, since it presented an ideal. One person mentioned that the path is "heteronormative" (i.e., biased toward a heterosexual orientation) and may not represent the path that others follow.

"Because I think that right now all the stuff that we do, it can change, like your grades. If you get good grades you can get to a good college and that's a big move. It can make a big difference in your life."

- African American, 15–17

A few groups mentioned the absence of boys and men in this poster—that it was focused on women. These groups mentioned that it would be beneficial to show/add images of men to the poster as they need to get screened for CT and STDs as well.

"The other thing I noticed is that it didn't have any boys on it, it's all girls. Because girls can't only get it and you can get it from boys, I think it should be a man on in."

- African American, 15–17

A few women mentioned that the poster did not have an obvious connection to CT, but they felt that the poster grabbed attention and illustrated an important message related to CT. These women felt that it was not necessary to increase the focus of the message on CT.

"It's nothing to do with Chlamydia. There's a tiny word in there in the middle and I was gonna get there."

- Latina, 18–25, Work

"I wouldn't think that this is an ad for Chlamydia if I see it. It's more like, I think, I don't know, maybe like for goals or something like, or something else. It's just, I don't know, for your career or something. I think this approach. Sometimes when you see Chlamydia or sometimes if you put things out about health and disease, young people don't wanna read it."

- Latina, 18–25, School

Women in almost all groups felt that this poster was relevant to them, although two African American groups mentioned that the images could be more diverse. One group of Caucasian teenagers in Atlanta engaged in an active discussion on the diversity of models. Some individuals believed that the women featured should represent the same woman, but others felt that it would reach more individuals by displaying racially/ethnically diverse women.

"I think that the picture is average people and I think a lot of young girls have an idea that only, I don't know, certain people might get it. It's like the average people can get STDs."

- Latina, 18–25, Work

"I don't like how they used different people. I think it would kinda flow better but the pictures, if it was like, people that looked the same because I know you can't get pictures of the same person throughout their life. It'd be really difficult. Maybe if it was, they had similar features because it gets from a white person into a black person. Then, she looks white again and then maybe Hispanic and then black."

"I feel like it would look better if it was the same person throughout their life because it could just be different people at different stages."

- Caucasian, 15–17

Almost all groups felt that the poster was attention getting and motivated them to think about their future, be more mindful of choosing their sexual partners, or to get screened for CT.

"I wanna get tested. Clearly I heard about chlamydia, so I would be curious about it and then the fact that it says it can lead me not to have babies. They would let me know that it's not always detectable because people can't have babies by this so to see if they can have babies, so I will get tested or ask more questions. If I don't get tested that day, then I will set up something for later. I'd definitely ask. It will make me curious and ask."

- African American, 18–25, Work

"Yeah. As a matter of fact I'd go and get tested tonight if I could 'cause this is really for real because this would... affect me having kids."

- African American, 15–17

*Visual Elements*. Most participants liked the use of bright colors in this poster. They felt that the poster was "pretty" and "colorful." They found that it captured their attention because of these factors.

"It actually kind of caught my attention because I see all these pictures spaced out and that makes me want to know what they are talking about. I actually read everything right then and there."

- African American, 18–25, School

"It's bright and it stands out. The cover stands out so they catch your attention. If it's like a flyer and it's handed out, or if it's a poster then the cover will attract you then you actually read it."

- African American, 18–25, Work

Several groups, especially those in Atlanta, GA and a group of working young adult African American women in Alexandria, found the visual layout to be "scattered" or "busy." Some individuals found it difficult to follow the sentence written in the block letters. A few participants missed some of the words presented in the blocks.

"I like the pictures, but I think it's kind of hard to follow those sentencing all the way down because the one when I first missed. I didn't realize this was all one sentence until I read it on here. It's hard follow it all the way down."

- Caucasian, 18–25, Work

As mentioned above, participants suggested including more diversity and men. They also suggested finding a more empowered picture of a working woman (e.g., a picture of a woman leading a meeting, instead of just writing on a computer).

"There's only one picture of an African-American. I'm not saying this to be mean, but some people will look at this and be like, oh, this seems like it's a white issue, not, you know what I'm saying? I know some of my friends, if they see white people in the picture. They'll probably think, oh, this is probably white people's issues and then turn the page."

- African American, 18–25, School

"Yeah. She graduates college. Oh I guess, she does go to work like she's writing. It could be more effective like if she's leading a meeting or something."

- Latina, 18–25, Work

*Body Copy*. This poster presented factual information the role of small decisions on one's future, that CT can lead to infertility, and that it is not too late to get tested, treated and cured.

Participants were generally happy with the body copy presented on this poster. They found it engaging and interesting. Five women, all Latina, wrote that they "love" it on their printed copies.

"I like the, it's not too late to get tested, because they're saying if you get tested and you do have something that it's not just nothing you can do about it. You can get treated and depending on what you have, you can be cured and go on to leave a normal life again."

- African American, 15–17

"I like the fact that it says it's not too late to get tested, treated or cured because it's true it's never too late for anything."

- Latina, 15–17

Participants suggested removing one sentence, "from the people you hang with, to the places you go," because it suggests that individuals do not know how to make correct choices. It suggested that a woman could not spend time with people who make poor choices without engaging in those behaviors.

"Probably I'm gonna say, the one that the people you hang out with, to the place that you can go. Because, I think when you go with certain people. They might be doing bad things, but that don't necessarily mean you have to follow what they do. It can change your mind about how you want to see yourself or something."

- African American, 15–17

"The things you do now kind of have a big impact on your life and the people you hang with, the places you go, I don't really like that. I don't think it's important because the places you go and the people you hang with don't necessarily give you an STD."

- Caucasian, 18–25, Work

A few participants in a group of Latina teenagers in Dallas mentioned that they did not consider themselves to be "women." After considering options like "ladies," "young ladies," and "teens," they decided that "woman" made the most sense in the sentence. Several participants crossed out the word "babies" during the print activity. This word was infrequently discussed during review of this poster, but some suggested replacing it with another word like "kids" or "children."

A few participants suggested that additional information about the outcomes of CT or statistics about CT be added. One woman also suggested that the information about infertility is exaggerated as it takes an extended period of time to become infertile.

"I think I really like it, too. I wish it didn't just say if you get Chlamydia, you can't babies. That's what she said. If you get Chlamydia, did you know you can't have babies? You also, I don't know the other facts, but you also might have something else that would kind of make your life suck."

- Caucasian, 18–25, School

"Is there any other bad side effects from Chlamydia besides infertility? Because I was thinking, like it's been said other women don't care to have children. What else is gonna scare them if they don't mind?"

- Latina, 18–25, School

#### Café

The *Café* poster features a number of people sitting in a café. A few are talking while others on using computers. Most of the models have a caption over their head that, at first review, may suggest when or how frequently the person has sex, but after reading the body copy the viewer realizes that it is talking about STD testing. The intended message of the poster is to normalize screening behavior and suggest that many people get screened. There is not a caption over the main model featured.

*Concept.* Most participants responded positively to this concept. They appreciated how the message and visual display suggest that people are not alone — that everyone, across races/ethnicities, ages and socioeconomic classes, is at risk for STDs and should be tested.

"This one draws you in more. You see the caption and you read it. I'm like, oh what on earth could they be talking about? (Chuckle) Then, continue reading."

- Latina, 15–17

"That's true because even [though you] don't you wanna talk about it, you'd be surprised how many people have actually gotten tested even though if they just don't share it with people. Kinda like back to the whole confidentiality thing where it's like other people don't really need to know as long as you know."

- Caucasian, 15–17

"I like that it's more social. To me it looks happier because the other ones, it was just talking about one person's particular journey, going to get tested and they're having Chlamydia or something like that. This one shows that more people are involved in the situation like you're not by yourself doing it. It just looks better to me."

- African American, 15–17

Although most participants thought the poster seemed appropriate for STD testing, upon first glance, some thought it was more appropriate for a birth control, college, or computer advertisement

"If I saw this on the street, I would think they're trying to advertise a computer."
- Latina, 15–17

The double entendre presented through the captions captured individuals' attention. As many thought that the captions were referring to individuals' sex lives, they were interested in reading more. Some who read the details at the bottom stated that they only knew what the captions were referring to because they read the details first.

"I like that it shows what people are doing up here. How many times they have sex. Then the pictures draws you the text and it makes you wanna read."

- African American, 18–25, Work

Discussions focused on why the featured woman did not have a caption, and participants were generally split about this design feature. Some believed it was because she did not know that she needed testing and/or that she was researching testing, while others interpreted that she had been tested and/or she did not need testing because she was not sexually active. Although there was discussion around the lack of caption, many of those who preferred this concept perceived that she is taking care of her body. A few individuals wondered why the older man did not have a caption.

"I noticed she doesn't have or if I'm mistaken, I don't know if this, to me I don't see an arrow pointing at her."

"Because she got tested, right? Is that right?"

"I think she is the one who needs to get tested because everybody else has something pointing"

- Latina, 15–17

The concept resonated with participants because they felt like this was a moment in someone's life—that it could be their life. However, several teenage groups felt that the location and models were not relevant to them. Specifically, some wanted the models to be younger. Others thought

the models should be younger and be in places frequented by teenagers such as parties, movie theaters, or schools. The teenagers described what a party should look like.

"The picture was taken at a public place, a kind of place that a lot of people our age would be. It doesn't look overly posed anything as far as the image goes."

- Caucasian, 18–25, School

This concept was perceived as using a light-hearted humorous approach by some of the adult groups. In their opinion it used an appropriate amount of humor while still taking the topic seriously.

"I don't think it's too lighthearted. I think it's a nice balance of seriousness and lightheartedness."

- Caucasian, 18–25, Work

This poster was considered attention getting across almost all groups. The colors and labels caught their attention. Most teenage participants did not think that this poster would motivate them to learn more about or get tested for STDs. However, young adult women found the situation relatable and frequently mentioned that it would encourage them to get tested.

*Visual Elements*. Participants generally liked the visual elements of this poster. Most liked that there was a colorful background—that it was not a model against a background or frame. It portrayed a group of people who were considered somewhat diverse in terms of race/ethnicity, age and lifestyles.

"I like the way that they're wearing [colorful clothes]. I like that color. The little background of it."

- Latina, 15–17

Participants provided mixed feedback about the use of captions. Their intended purpose, to label people, was not always clear. Some participants mentioned that they thought the captions looked like they were pointing at people or labeling them. Others thought the models were talking or thinking. One group mentioned that they preferred the way captions were used in the *Library* poster because they clearly referred to people, but did not label them or suggest they were saying things out loud.

"I think if they did have the little blurbs on the people and not pointing at them. It would be a little bit better but the way that they have it pointing at the person is awkward. It's really awkward."

- Caucasian, 18–25, Work

Several groups mentioned the benefit of having men in the poster. The inclusion of males was met positively as STDs are not only a female issue.

"The thing I really like about this one is that they have guys in it. I like how it says 'he gets tested' because none of the other ads have really mentioned that boys should get tested. I think that's a bigger problem in our world, us getting tested. Sorry I'm bitter about that, but I don't think we should just stop at testing women only..."

- Caucasian, 18–25, School

"Also covers a wide range of people that you have a younger guy and then there's ease with professionals, it covers a wide range of people. Not just targets or it's one audience."

- African American, 18–25, Work

*Body Copy.* Key messages in this poster were that STDs are common, anyone can get an STD, more people get tested than you realize, and you need to get tested regularly to find out if you have an STD

While reviewing the body copy some felt that the copy was easier to read and they were more interested in reading it than other posters. Others, especially two African American groups conducted in Atlanta, were not interested in reading the body copy. One group mentioned that they liked how "STD" was in a larger font than it is on other posters. Almost all of the content was viewed favorably. Participants liked that this poster explained that anyone can get STDS and that others do not need to know if you get tested. The only piece that was consistently disliked was "you're in good company." Participants felt that this sentence was unnecessary or that it suggested that others would know about your STD testing. These participants considered it contradictory in comparison to the confidence message in the *Library* poster (i.e., that no one needs to know).

"I would say my best one was the last one, where it says get tested regularly. It's the only way to know for sure because, like they were saying, so many people figure I don't have anything because I don't feel the symptoms or I don't see it. I just know that he doesn't have this, but at the same time people don't actually know nothing until you actually go find out."

- African American, 18–25, Work

"The only sentence that I didn't like is that you'll be in good company. It's kind of unnecessary especially if you're trying to say..."

"Just extra wording."

"Yeah, if you're trying to say, oh, you don't have to tell anyone about your STD testing why would you care if you're in good company? Everything else, I thought was short, sweet, to the point, and very knowledgeable."

- Caucasian, 18-25, Work

Participants provided a few overarching suggestions for the body copy. Several found that the incomplete sentences were awkward to read. Further, the lack of specificity in the phrase "often they can't tell by looking" confused several working young adult women. They did not know if the sentence was talking about STDs or STD screening, and exactly who was being referred to

that could not "tell by looking." Although the statement was intentionally broad, it was interpreted as being unclear.

"It's also like a lot of incomplete sentences. It's to single people, people in relationships, even people who have only one partner. What about them? Often you can't tell by looking, you can't tell what? It just doesn't seem like a complete thought."

- Caucasian, 18–25, School

Several participants commented on the phrase "to single people, people in relationships, even people who've only had one partner." This phrase was considered necessary by many individuals as it reminded them that everyone is at risk, including those who have only had one partner or may be married. Some teenage Latinas in Dallas crossed this phrase out, explaining that it upset them, as they did not think it was fair that individuals with few sex partners can get STDs. Nonetheless, this information was new and struck a chord with these women.

"I like it actually because I'm married and it draws my attention, like otherwise I would probably just think it's just for people that are going around having sex, but it's not. That sentence just reminds me that it could be me too. You know what I mean? I know that everyone can get it and I know but it kind of brings me in a little bit more."

- Latina, 18–25, Work

While reviewing the captions, a few young adult groups commented that they do not relate to the acronym "BFF" for "best friends forever." One teenage group of Caucasians was turned-off by the use of the shorthand/texting language. Shortening to BFF suggested that the materials were written by adults who were trying to reach a younger audience.

"I have a question, why does this one for the girl in the purple, why do they say BFF? Is that best friends forever, is that what it stand for?

"This thing right here, 'Have a BFF', do they call her that...BFF?"

- Caucasian, 18–25, School

#### Scan your hardware

Scan your hardware featured a young woman with a box over her genital area that says "Scan your hardware: You may be infected!!!" The box was intended to look like a pop-up box warning you that something is wrong with your computer, and prompting you to scan it. The box presents two options "start scan now" and "ignore," but "ignore" is faded to illustrate that it is not an option. The poster body copy played on the analogy between one's body being infected with an STD and one's computer being infected with a virus.

*Concept.* This concept had mixed feedback from participants overall. It was viewed favorably by many participants in the teenage segment. Young adult students viewed it less favorably, and it was least popular among the working young adult segment. There were few differences by race/ethnicity, although Latina participants viewed the concept slightly more favorably.

"Not this ad, but they'll have this pop-up on their page when you say something weird or whatever. I feel like it's been done a gazillion times and it's just kind of corny to me."

- African American, 18–25, School

"It's horrible. I do not like it at all. It gets really cheesy. You may be infected. It's just really not enjoyable at all. I would laugh at this, which I did laugh at it. I don't like it at all."

- Caucasian, 18–25, Work

Those who liked the concept felt that it was "clever" and that it got their attention. Many of these individuals liked the analogy between computers and their bodies. This was especially true for the teenage participants, many of whom stated that computers are part of their daily lives. Further, teenage participants believed that the concept related to them while several groups of young adult participants thought the poster was designed for or more relevant for teenagers. One group of working young adult African American women suggested that this could also be relevant to those in college. Teenage participants liked the humorous analogy that the poster used and said that this caught their attention.

"I like this one a lot. (One respondent agreed.) It just makes sense to me. Especially, a lot of people our age are using computers. We get it. You may be infected. We know what it means right off the bat."

- Caucasian, 15–17

"I don't love it, but I think that if I was a 13-year-old and, you know what I mean? I think that it might, I don't know, it might kind of work for someone who's really into social networking and all that kind of stuff. I don't know. I think there's ups and downs of it."

- Caucasian, 18–25, School

Among those who felt the poster was relevant, they either liked using computers or they believe the model that was similar in age to them (frequently teenagers). This poster was considered motivating to individuals in six groups, all of which were teenagers. They expressed that the poster motivated them to learn more about the topic or get screened.

"She's our age. It seems like she's around our age. That's why to me, I will look at it, too. I like the other one too, but this one, she's our age. It seemed like we're right in front of her talking with her."

- African American, 15–17

Although there were mixed feelings with those in the young adult segments, some, mostly those in the working segment, had very negative perceptions of the concept, reporting that it was "disgusting," "offensive," "tacky," or "a joke." These groups expressed that the humorous analogy made STDs seem like a joke. Other young adult participants did not like the comparison of a human body to something mechanical or replaceable like a computer. Much discussion was had about the placement of the box over her genital area; for the most part viewers thought it was appropriate, but some of those who disliked the poster concept thought it was offensive. Across

most segments, but especially in two groups of young adult Caucasian students that disliked the poster concept, individuals crossed out the words "downloaded" and "operate." These sentences highlighted the analogy that one's body was like a computer.

"I was gonna say I don't like it. I think it looks kinda stupid with those, scan your hardware. I understand what they're trying to say, but it's kinda like a joke to me. That really sounds serious; the girls are laughing about it."

- African American, 15–17

"To compare your body to, just mechanicals are a certain extent to something that can be replaced. The computer, a younger person will not necessarily connect it like you said, because it is kind of like, I can get another computer. My parents can buy me another one."

- African American, 18–25, Work

While some of the viewers perceived that the material would be a poster displayed in a public place or a magazine advertisement, some perceived that it would be something that "popped up" on your computer screen. These individuals said that they would close the pop-up box before reviewing it.

This poster was not considered motivating by the majority of participants. The few that said it was motivating were teens, who said they were motivated to think about STD testing.

*Visual Elements*. Participants were mixed on the visual elements of the poster. A number of participants across segments provided feedback on the background color. A small number liked the white background and how it highlighted the model and box, while the majority believed that the white was too "bland" or "dull." Some suggested using a color or picture while one group suggested using an image that looks like a computer desktop.

"It's plain to me. It's a plain white background. That's really boring. Change it up a little bit."

- African American, 18–25, School

"Yeah. It's like she gets lost in the image. Maybe give her brighter colored clothes and change the background, maybe give her a background, not something that's so distracting, you wouldn't see this. The white is not so great."

- Latina, 18–25, Work

As mentioned previously, participants viewed the model positively although most young adult groups felt like she looked too young. Most teenage participants perceived the model to be their age, although one group stated that the model looked too old. Several groups noted that she looks like an average girl. A small amount of feedback was received on the model's facial expression. Most liked that she was smiling because it made her look confident while a small number questioned whether she looked too happy. Individuals in two groups suggested that the poster feature both a girl and a boy as both are at risk.

*Body Copy*. This poster provided information about the asymptomatic nature of STDs, that STDs can cause permanent damage to your body, and that there are free and simple ways to get screened and treated

Participants were generally positive about the body copy on *Scan your hardware*, with the exception of two statements: "It's no big deal" and "And your entire social network will thank you." Participants in the majority of groups provided negative feedback on "It's no big deal." They felt it suggested that STDs do not need to be taken seriously or that an individual can be promiscuous since "it's no big deal" to get tested and treated for STDs. Further, some suggested that having an STD, like CT, is serious and that it is a "big deal."

"To me it's kinda saying, if I wasn't a little older, maybe if I was really younger, it's saying there are free and simple ways to get screened and treated. Some STDs can't be treated. It's like it's no big deal. Basically, it's telling young people that they can go out there and maybe have sex with whoever without protection. There's no big deal as long you get tested."

- Caucasian, 18–25, Work

"Basically, you can go out there and have unprotected sex. There's no big deal as long as you get screened and treated. Simple ways to get treated, there are some STDs that cannot be treated."

- Caucasian, 18–25, Work

Much discussion focused on the use of the phrase "And your entire social network will thank you." Feedback on this statement was mixed, but tended to be more negative. Some individuals liked how this statement connected to the computer analogy used and found the humor in it. Others were not sure if "social network" was referencing sex partners or friends, but pointed out that you would not give STDs to or get STDs from your friends. Further, others interpreted it to suggest that their social network would know that they got tested, which contradicts messaging about the confidentiality of testing.

"I guess a lot of teenagers can understand what it's saying, like a social network and stuff like that. Like the computer, like she said, we use the computer a lot. I put it in a way like we all understand."

- African American, 15–17

"I think social network pertains to your sexual partners as far as this text goes. By saying that they'll thank you, both of you will benefit in the long run if you're tested."

- African American, 15–17

Participants, especially teens, received "There are free and simple ways to get screened and treated" positively. They were interested in learning that there are free ways to get screened. Some participants crossed out the word "simple" on their written forms. The word "simple" did not come up in the focus group discussions.

"I underlined there, free and simple ways to get screened and treated. Even though it's a bad thing, you can get rid of it."

- African American, 15–17

Participants provided positive feedback about the first two sentences: "STDs can get downloaded into your system without you even realizing it. They operate silently but can do permanent damage to your body." In the written feedback these lines were underlined or left blank more frequently than being crossed out.

Participants were interested in seeing more facts about STDs on this poster. Two participants suggested including primary prevention information on the poster.

#### Confidence

Confidence featured neutral colors and a young woman in a scrollwork frame. The body copy was written in the first person. The model told viewers that confidence was her most beautiful feature. This message was intended to empower women to confront CT testing and the potential diagnosis and treatment of CT. It provided information about how CT can lead to infertility.

Concept. Participants offered a wide variety of feedback on this concept. Individuals discussed the concept more positively than the execution and design. Many reported that they liked the type of information/message portrayed by the poster. They liked that the information was relevant and interesting to them. Two Caucasian groups considered the emotional approach taken by this poster to be effective, especially for women. Others referenced that it is relevant as many women, of all ages, have self-esteem issues. Further, a group of young adult Caucasian students mentioned that confidence is frequently a barrier to STD testing and that this message is motivating in that it promotes confidence. Generally, participants did not perceive that they would be motivated by this poster to be screened for CT, but that they should have more confidence in themselves. It made participants think about how much confidence can have an impact on their lives. One group suggested that the model featured would be a good role model. They perceived this message as being realistic because it is a girl talking about her experiences with CT and CT testing.

"It's a little deeper than the others. It's more on emotional level. You have confidence. If you know you get tested and you know yourself inside and out. That was good, I like that one. I like it."

- Caucasian, 18–25, Work

"It jumped out at me how realistic and yet emotional it can be. That's what I like about it."

- Caucasian, 18–25, Work

"I think that the confidence thing is more powerful than just the people don't care about you getting tested."

- Caucasian, 15–17

"It's general enough without the baby's part to say that whether you're 15, you have self-esteem issues and whether you're 25, you have some type of confidence issues-- so it kinda does speak to me for the whole spectrum. I think the only thing that is not so great is ... she looks like she's all tired and worn out. Maybe she is just not the person to have there."

- Latina, 18–25, Work

Most participants did not like the execution and design. Although many liked the message, there was confusion over the connection between the "confidence" theme and CT. Further, when individuals looked at the image, most would not consider the visual representation of colors and model to resemble what they would consider to be confidence. See *Visual Elements*, below. Four groups mentioned that they thought this poster could be an advertisement for an antidepressant medication, while others thought it was similar to other self-esteem advertisements (e.g., Dove Campaign for Real Beauty).

"You would think it's about self esteem."

- African American, 18–25, School

"Just the whole confidence thing. It doesn't have much to do with Chlamydia, I don't think."

- Caucasian, 15–17

This poster was not considered attention getting because of the neutral colors and model. A small number of participants stated that this poster would motivate them to be more confident. None of the participants mentioned that it would motivate them to do anything related to STD testing.

Visual Elements. Many participants did not think that the featured model exuded confidence. Very few groups had positive feedback on the model; these groups were more likely to be younger and Caucasian. From their perspective, the girl was considered to be average and someone they would like to meet or talk with. Those that did not like the model reported that she did not emanate confidence to them. They felt that a confident person should be smiling. Many thought that the model was sick, too pale, depressed, or on drugs.

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"It doesn't look like she has confidence."
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- African American, 18–25, Work

Most participants did not find the poster relevant because they could not identify with the model. However, those who did identify with the model found the poster relevant.

"I think that this picture compared to this one [the library poster], it's so much more engaging because it's a picture of just her and she's looking right at you. Her face is right there."

- Caucasian, 15–17

<sup>&</sup>quot;She looks sad."

<sup>&</sup>quot;She looks depressed."

<sup>&</sup>quot;She just found out she has some [disease]..."

Many believed that the poster could be made more relevant to them by changing to a different model that better portrays confidence. Few participants offered suggested replacements, but two teenage groups in Dallas suggested that Beyonce, Alicia Keyes, and President Obama exude confidence. (Note that while reviewing *Scan your hardware*, three groups considered the model to be confident.) Several groups discussed whether the individual featured should be "models" (i.e., a professional beauty model). There was disagreement on this topic, with women feeling both ways. Individuals in two groups, one Latina and one Caucasian, suggested that the best way to demonstrate confidence would be through a group of diverse women.

"She looked ashamed like she's trying to have confidence but she shouldn't have her head down."

- African American, 15–17

"She'd have to be a really beautiful model that's smiling, that's alluding confidence, that has that look and a more colorful bright background."

- African American, 18–25, Work

A number of groups commented on the use of neutral colors in the poster concept. All of these groups suggested changing the colors to something brighter and less dull. Some suggested using colors like those in *The woman you want to be*.

"The colors other than her red jacket are kind of bland. I don't think if I was flipping through a magazine and this was an ad in it that I would stop and look at it. Don't get me wrong. I don't want it to be bright hot pink but something a little bit more catching than this mauve-ey color."

- Caucasian, 18–25, Work

A small number of participants commented on the use of the border. Some liked the border while others considered it unnecessary.

*Body Copy.* This concept detailed that there are things, including STDs, that could have an impact on your future, that CT can prevent you from having babies, and that you should get tested for CT so you can get treated and cured.

Different preferences were provided on the body copy during the focus group discussion and the activity during which participants noted liked/disliked words or phrases. During the discussion, participants mentioned that they found the information relevant. Participants found that it was useful to read facts about CT. They stated that they wanted to learn more information about CT, its symptoms, and its outcomes. However, during the written activity they frequently crossed out the information about CT leading to infertility. A few women doubted whether women who did not want to have children would be interested in that information, and suggested instead highlighting other outcomes. (Note that this issue did not arise during discussion of *The woman you want to be* poster.)

Another disconnect between the discussion and review of the written comments was found in reference to the theme of confidence. Participants frequently mentioned how they did not find confidence to be relevant, yet the most frequently underlined piece of content was "Confidence comes from knowing myself—inside and out."

Several participants, most young adults, thought the word "babies" was condescending and suggested replacing it with another word like "kids" or "children." A few participants thought the words "and can treat it and move on" could be deleted from the poster because they suggest that CT and STDs are not something that needs to be taken seriously.

"I like it but I don't like this whole baby thing. It kinda sounds childish."

- Caucasian, 18–25, School

"Yeah, it's good to move if you have an STD, you treat it. You just, combining the treat it and move on. I know myself. It just kind of borders on this whole elusive idea that you could be empowered and just sleep with anybody, it doesn't matter."

- Caucasian, 18-25, School

"I crossed out how you say you could treat it and move on. You could treat it and forget about it, which might be good, it kinda might be bad. People might think you could just blow over it."

- Caucasian, 15–17

A few participants remarked on the use of the words "every year" in the phrase "I get tested every year, so I know if something is wrong and can treat it and move on." One group feared that they would get CT not long after being tested and that it would not be detected for another year. They were concerned that their CT would lead to infertility before their next screening.

"I got something to say. I have something that I don't like about it. It's just that I get tested every year. If you have Chlamydia for a year you get tested like in December. It's already worse where you can't have babies so she should be tested every month not every year."

- African American, 15–17

Participants were mixed, but leaning toward negative, on the phrase, "I'm not OK with that." Those who disliked it felt that it was unnecessary. Many participants crossed out the phrase, "I take care of myself and my future. And I don't let things stand in my way." Participants did not explain why they crossed this statement out.

### Library

Library features a young woman in the foreground of a library. Four other individuals are featured in the background with phrases, such as "Not at all" and "Not so much," that refer to their level of concern about the featured woman getting an STD test. The intent of this concept was to decrease perceived peer stigma by telling audiences that their peers do not care if they get tested, nor will they judge.

*Concept.* Overall, participants did not like this concept. Some teenage participants recognized that peer stigma can be a barrier to STD testing, but this was not a relevant concern for young adult participants. Several suggested that the poster isolated the featured model from others in the library, which suggested that she was being stigmatized for getting STD testing.

"I thought they didn't like her. (Laughter) Yeah, I know. Not at all. I don't know. I thought that they didn't like her 'cause I read the first lines too and I was like, oh she must not be too cool."

- Caucasian, 18–25, School

Participants across age groups agreed that confidentiality is important in testing, but that the message was not effective at illustrating this point. Many reported that they knew that confidential testing and treatment were available, and that the only way that people would know that you were tested is if you told them. Individuals in younger groups mentioned that others may find out if they encountered them at a clinic, or if their close friends with "big mouths" shared their personal information. Some participants misunderstood what the poster was intended to convey, believing that her peers knew she got tested and did not care, which contradicts the message about confidentiality.

"I like that one sentence, the confidential ways to get tested and treated is probably the best message and sentence in the whole thing."

- Caucasian, 18–25, School

"I think it's contradicting what the rest was saying and what the person in the story is saying. Because it's saying you don't have to tell anybody, but then all these people don't care. How do they know if it's confidential? I don't get it how it is people supposed to know."

- African American, 15–17

Participants were confused by the main message of the concept, "You'd be surprised how little people care about you getting an STD test." Some thought the phrase "little people" was referring to a type of people (e.g., little people, children) instead of the extent to which people care. Others were confused by the use of the word "care" and that people might care and be interested that a person gets an STD test. One participant suggested that the confidentiality message could be captured if "care" were replaced with "know."

"It's totally confusing to me. That things meaning nothing. The picture doesn't go with the wording or anything. I don't understand what's little people? You'd be surprised how little people care about you getting an STD test. Who is the little people?"

- African American, 18–25, Work

"I think it's very negative. (One respondent agreed.) You'll be surprised about how little people care. First of all, if I read this and I do have an STD, this is not positive reinforcement like, maybe I'll go around spreading it since people don't care if I have it."

- Latina, 18–25, Work

Some individuals misread the main message and omitted the word "test" and considered the message to say that people would "care about you getting an STD." This seemed incorrect as family, friends, and sex partners would care about this information. A few misunderstood the message as saying that people did not care about *you* or whether you got tested.

"When I first read it, I thought it meant, I just skipped it. I thought it said no one would care if you have an STD or something. I don't know. This doesn't look very catchy or clear like she said."

- Caucasian, 18–25, School

This concept was removed from testing after 13 groups due to participant concerns about the message. Although most did not like it, teenage African Americans and a group of young adult African American students in Atlanta, GA were more positive about the concept. The teenage African Americans considered the message and location relevant. The young adult African American students identified with the model featured, who was African American, and the location. This poster was not considered motivating in relation to STDs, except to the group of young adult African American students who were motivated to talk to their friends about STDs.

Visual Elements. Participants frequently reacted to the visual elements in materials before they reacted to the message. Participants across all segments mentioned the disconnect between STDs and the library setting. It was not clear how the library was an appropriate setting. Some mentioned that it looked like a college advertisement poster. Further, individuals in all segments mentioned that the library setting suggests that the audience is high school and/or college students, which would not include young women who are out of school. Many found the library to be an awkward setting as people do not talk about STDs or hang out in the library. Some teenage participants suggested using a school hallway or a party situation instead of a library. Some thought the library was used to illustrate that the model was researching CT. Another participant thought the library was a quiet place to think about STDs.

"Again, I don't like the pictures. When you look at the picture itself, I don't think it has anything to do with STDs until you read the text maybe, it says STD. I think this is too much wording. It kind of points out the fact, so it's like that there's confidential testing and no one has to know it. It had so much wording.

- Latina, 18–25, Work

"I'm trying to figure out why they're in the library 'cause I'm just too old to be in the school library. For some reason, this wording bothers me.

- Caucasian, 18–25, Work

Few participants provided feedback on the model. One group of young adult African Americans remarked that she looks like an average girl while another group of young adult African Americans in Virginia said that she looked like she was wealthy. One participant noted that the model looked too happy to be on a poster about CT.

One group mentioned that the colors used in the poster were not eye-catching.

Participants provided mixed feedback on the use of "thought bubbles" on the individuals featured in the background. Some participants mentioned that the bubbles caught their attention and made them interested in finding out what they were talking about, while others were not sure if they served a purpose. One participant described the thought bubbles as telling a story.

"I feel like the message, the photograph, and the text is confused because it's like...what are they talking about it here? How does that relate to this down here?"

- African American, 15–17

*Body Copy*. The content stated that you need to get tested to find out if you have an STD and that there are free and confidential ways to get tested and treated for STDs.

Participants considered the body copy to be too wordy and thought that some messages could be shortened or removed because they were unnecessary or repetitive. Across all groups, the most important/useful piece of content was "there are confidential ways to get tested and treated." This piece of information was considered informative and to the point. Two other phrases that were also identified as important/useful by the teenage participants were "They don't have to know" and "It's your business." These pieces of content were useful because they reminded participants that they do not have to tell anyone about their testing. Participants were mixed on opinions of "and you can feel good knowing you've taken care of your body," with some thinking it was good to remember you are being responsible about your body while others thought it was condescending. Participants crossed out most of the other content. Some participants, especially working young adults, crossed out the entire body copy, feeling that it was not helpful or useful.

"I can't really relate to it, but on the other hand, I like how they talk about how you can get tested confidentially 'cause I know a lot of people may be embarrassed or something by getting tested."

- Caucasian, 18–25, Work

"I like the last two sentences or the last three 'cause they're true. I like that it brings up that there are confidential ways because some kids, their parents don't know that they're sexually active. And so, they don't get tested because their parents don't know but you can do it without them. You can get tested for it so that's good."

- Caucasian, 18–25, School

"I don't think the text was helpful at all. In the previous posters at least it was telling you, like you could get tested for free in some places or what you get tested for. This doesn't give you any real details or repercussions of having an STD. Some people might not know that STDs can make you infertile and then they just don't get tested because it doesn't matter. The poster didn't tell them anything."

- African American, 15–17

### Lots of things say you're a woman

Lots of things used a format similar to a paper doll featuring a woman in a box with a number of female accessories (e.g., a dress, shoes, sunglasses, a small dog). A urine cup and two swabs are

included among the accessories. The message suggests that there are many things that are being part of a woman and that CT testing should be one of them.

*Concept.* This concept was overwhelmingly disliked by the participants in Atlanta, GA and Alexandria, VA. It was disliked so strongly that it was removed from the research after these two cities.

Those that did not like it found the presence of a urine cup "tacky" or "gross." Many expressed that it was offensive and unnecessary. Further, others felt as though the urine cup and swabs reminded them about needing to go to the gynecologist, which made them "scared" or less interested in going to get tested. Individuals in two groups remarked that they were glad there was not a speculum featured. Although the poster featured methods for STD testing, some did not see a connection to the urine cup and STD testing. Several noted that they associated drug testing with the urine cup.

"I like it. I like the colors. I like the way that she's just standing there. Then there was like a pee cup in the corner is like what? It's not a nice thing. It kind of made me wanna read."

- African American, 18–25, Work

"It's pretty personable but the Q- tips..., I do not look forward to my yearly exams and those Q-tips, man, it's just weird. Uh-uh. I don't like that, the whole thing."

- Caucasian, 18–25, Work

"Is that pee in a cup?"

"That's disgusting."

- African American, 18–25, Work

"That's scary but that's what you're supposed to invite them to wanna do. If you're encouraging these girls to go get STD testing and you have this big scary Q-tips and a urine a cup."

- Latina, 18–25, Work

Others disliked the poster because it stereotyped women. Some said that it suggests that women need to wear heels and dresses and that those who wear jeans and sneakers are not women. Others suggested that it portrays "girly girls" as dolls.

"I really don't like it. I've seen guys wear dresses and heels and I've never wore dresses and heels and I'm a woman, I don't know. I can't really relate. I like big dogs." "It's like who's to say what makes you a woman."

- Caucasian, 18–25, Work

Some participants believed the poster was attention getting because of the colors or their interest in fashion. One group of young adult Caucasian students in Alexandria, VA suggested that the

poster be improved by using actions/activities (e.g., shopping, getting hair or nails done) instead of items/accessories.

"I feel like it would be attractive if the header was like, we have to do it, and then like shopping, hair, nails, or something like that if you're appealing to a girly girl, similar with purses and necklaces and shoes and stuff. We have do it, and then like shopping, all the stuff that girls do. Then at the bottom, get tested, something like that. That would be more striking to me."

- Caucasian, 18–25, School

*Visual Elements*. Most participants liked the use of bright colors in the poster while others felt that there was too much pink. A few participants commented that the dress was out of fashion. Others thought the urine cup and swabs were too large in proportion to the other accessories.

*Body Copy*. The content stated that there are things women need to do to take care of their health, such as getting tested for CT, which can cause permanent damage to their body if they do not treat it.

Participants were generally neutral about the body copy. One African American teenager in Alexandria, VA mentioned that the information reminded her that she should take care of her health.

"..lots of things and all that, I will get rid of them. Just go straight to the point. Women need regular test, so and so. I don't know. I just think this does too much. Maybe this should be bigger."

"It's too wordy."

- Latina, 18–25, Work

"The only sentence that I really liked in it was you need regular test to find how an infection can do permanent damage if you don't catch them and treat them now like Chlamydia. That's about the only sentence that I actually liked in the ad. The rest of it is just kind of generic to me."

- Caucasian, 18–25, Work

Individuals discussed "ask for a chlamydia test as part of your yearly exam." One Caucasian teenager in Alexandria, VA mentioned that she learned that she could ask her doctor for an exam. Others discussed whether individuals should be asking for specific tests or if they should just go for their Pap smear (they believed that the Pap test screened for STDs) or ask for STD testing without specifying which tests.

"The other thing that CDC could focus more is just the regular testing of any type not just Chlamydia but your annual PAP exam 'cause they're gonna identify those kind of problems once you're doing that exam. Don't focus it only on the STD testing's. Encourage women to get annual PAP exams and at that time they'll identify."

- Latina, 18–25, Work

African American participants and those in a group of working young adult Caucasian frequently crossed out, "Lots of things say you're a woman. Especially this. There are lots of things that come with being a woman, some we love to do and others we just do to stay healthy."

# 2) Approaches

# "STD" versus "Chlamydia"

Almost all focus groups addressed the merits of an "STD"- or "chlamydia"- focused campaign. Participants were split on whether to focus on STDs, CT, or a combination of both, with the groups leaning toward CT-specific or mixed STD and CT materials.

Those who preferred STD-specific materials thought that STD was a broader topic that people are more familiar with, and therefore they may pay more attention to it. Further, the acronym "STD" stands out in a paragraph of content because it is capitalized. These individuals also suggested that most women would not go to a doctor and ask for a specific STD test—rather, they would ask for a general STD test. Some assumed that other STDs were more serious than CT and that their consequences could also be emphasized. Others assumed the same messages (about symptoms, infertility) could be used for other STDs interchangeably. A small number of participants were either not familiar with or did not like the word "chlamydia."

"STDs because it's more broad. Chlamydia is basically just one STD. There are more STDs out here that are more life threatening than chlamydia. Chlamydia, there is a cure for it.

- African American, 18–25, Work

- Caucasian, 18–25, School

Those who preferred an emphasis on CT believed that people are so familiar with "STD" that they may not pay attention to these materials unless it presented something new. Others thought that many are not familiar with the term "chlamydia" and may be interested in learning about the topic. Some stated that the purpose of the campaign is to get women tested for CT and that is what the focus should be.

"I would say Chlamydia because most people, like me, don't know much about Chlamydia. Chlamydia is like one of the ones that you don't know as much about. To know that it is treatable and to have a little bit more information, I think it would..."

- African American, 18–25, Work

"It's nice to highlight it because it is a disease that hasn't gotten a lot of attention over the years in school and things like that."

- African American, 18–25, Work

<sup>&</sup>quot;I would say STDs."

<sup>&</sup>quot;If you just replace the word Chlamydia with STDs, that wouldn't be completely accurate 'cause not all STDs do this.

<sup>&</sup>quot;There's a lot of more dangerous STDs than Chlamydia. I think those are important."

"When they say Chlamydia, it's STD too. It's just common sense that Chlamydia, all those STDs. It's just specific. I thought of other STDs besides Chlamydia when you read about Chlamydia."

- African American, 15–17

Several participants suggested that materials reference both CT and STDs by referring to CT as one STD.

#### **Female versus Male and Female Focus**

There was much discussion about the campaign having only a focus on women, and this topic sometimes came up without prompting; in other groups the moderator asked for input. Many participants observed that the draft poster materials were developed for women only. One group mentioned that they thought men were not at risk for CT since they were not included in the materials. Others suggested that this focus is appropriate because women care more about their bodies and the outcomes of STDs are worse for women. However, several participants pointed out that excluding men suggests that only women get CT and need to be tested for STDs. Some suggested that it perpetuates the stereotype that a woman who has multiple partners is promiscuous, while it is fine for a man to have multiple sex partners.

"Why do the women only have to go get tested?"

"If a woman has multiple partners, then she's whore, but if a man does it, then he's this big player type or something."

- Caucasian, 18–25, School

"This one I feel, it's just for a woman. We should be talking about guys too. Guys can get it without knowing that some girls can get it."

- Caucasian, 15–17

"I don't think that STDs only affect women. They don't say anything about the guys. They need to know too..."

- African American, 15–17

"It could still be directed towards women, but kind of having them think about their spouse also. You should get tested, you both should get tested."

- Caucasian, 18-25, School

Although there was not agreement across groups, many women suggested adding images of men to the materials. Participants noted that they liked how a man was included in the *Café* poster. They not only appreciated that he was featured and was getting an STD test, but that he was going to get tested with his girlfriend. They also noted that a man could be added to the images in *The woman you want to be*.

#### Tone

*Humor*. Participants were split on the use of humor in poster concepts. The teenage segment liked the use of the humorous analogy as demonstrated in *Scan your hardware*. They thought

that this analogy got their attention and made them want to read more. Young adult participants thought the use of the analogy in *Scan your hardware* was inappropriate and did not take the topic seriously enough.

Older participants discussed the use of light-hearted humor in the *Café* concept. They appreciated the use of a message that got your attention about the subject, but the remainder of the poster still presented the topic seriously. None of the teenage groups mentioned that *Café* was humorous or used humor.

Messages that used either type of humor were considered attention getting.

Aspirational/Empowering/Emotional. Participants across all segments appreciated the use of messages that encouraged them to think about their future (*The woman you want to be*) or to take care of their body (*Confidence*); however, the aspirational message in *The woman you want to be* was preferred. Empowering and aspirational messages/words were not attention getting on their own, but as demonstrated by the preference of *The woman you want to be*, the visual elements were able to attract attention and encourage further reading. Once individuals read the messages, they considered empowering messages to be motivating. Some participants referred to these empowering messages as emotional appeals, and mentioned that emotions are an effective way to appeal to women because they encourage them to take the topic seriously. Emotional appeals were considered "deep" and made participants think about the message.

Fear. Some participants, especially Caucasians, appreciated the use of fear appeals (e.g., that CT could prevent you from having babies), and believed that this was the best way to motivate them. They thought it was important to see relatable statistics about CT rates (in meaningful, scary/alarming terms) in order to get their attention. Generally, participants across groups suggested adding additional statistics and other CT-specific information like signs, symptoms, and undesirable outcomes in the posters to make them more effective.

# 3) Calls to Action

Three of the calls to action (*Get informed. Get tested. Get on with your life.; No symptoms is no excuse. Get tested.;* and *Testing is easy. Knowing is everything.*) were the most popular across groups. Each of these phrases will be discussed in detail below.

*No symptoms is no excuse. Get tested.* This was the most frequently preferred call to action. Participants who preferred this phrase reflected on the absence of symptoms in many STDs and that the only way to know if one has an STD is to get tested.

"I like the no symptoms because they're saying that [the] majority of STDs, you don't have any symptoms anyway. You can't just say, I don't have any symptoms. I probably don't have [an] STD because most don't have symptoms, so you should go get tested."

- African American, 15–17

Get informed. Get tested. Get on with your life. This was the second most frequently preferred phrase; however, many of these participants suggested removing "get on with your life." Some respondents thought that "Get informed, get tested" gets to the point. Participants found that "get on with your life" suggests that you get tested once and do not get tested again. Removing the last phrase suggests that you should get tested throughout your lifetime.

"I like that one, because it's like when you're getting tested, 'cause I must have this, you get really scared. When you find out whether it's positive or negative, you can go on with your life, whether it's in a positive, whether it's a negative way."

- African American, 15–17

"I like the get informed, get tested but I want to remove the 'get on with your life' part. I just like the just get informed, get tested. It's short and simple."

"Because you're not gonna be tested again."

"It's not like a once..."

"You got to keep it..."

"You need to keep on getting tested."

- African American, 18–25, Work

*Testing is easy. Knowing is everything.* This phrase was liked by a number of participants; slightly fewer Latina participants preferred it compared to the other races/ethnicities. Participants believed that it is important to know if you have an STD. Feedback was mixed on the first phrase "testing is easy." Participants disagreed whether testing was or was not easy.

"Testing is easy, because it really is easy in knowing that you don't get anything [it] is like everything. You don't have to wonder about nothing."

- African American, 15–17

"I crossed out 'testing is easy.' I don't think testing is easy. I think testing is hard for everybody so I crossed that out... people don't like their results and they're nervous and they wanna know right then and there, but they've gotta wait."

- African American, 15–17

*Take responsibility. Do the right thing.* This phrase was frequently crossed out by participants. Two African American participants indicated that it was offensive to them. Comments from two groups noted that they have heard this phrase before in other contexts.

"Like take responsibility, take responsibility of your kid and do the right thing, be a father. That doesn't necessarily make you think at all."

- African American, 18–25, Work

"I don't like the 'take responsibility, do the right thing.' I think you hear that too much in too many different places. I don't think that's motivating."

- Caucasian, 18–25, School

Don't wait. Don't stress. Test. This phrase was not preferred because participants believed that testing is serious and should be taken seriously. They suggested that people do and should stress about STD testing.

"I didn't like that it said 'don't stress' because you should, it's basically like saying, don't care about it. You shouldn't stress about it but you should be more aware and wanting to get it done."

- African American, 15–17

*Talk. Test. Treat.* This was least preferred phrase across all groups. Very little feedback was received on this phrase, but it was considered too general by one participant.

"I don't like the talk, test, treat. That is so general and broad. It doesn't really say what you're treating or testing."

- African American, 18–25, Work

# 4) Content

Participants provided a variety of feedback regarding the content on poster concepts and calls to action.

Participants felt that there was too much content on the posters. They stressed the need to stick with the information that they could read as they passed a poster without stopping to read it. During the written activity, many suggested deleting sentences that did not provide factual information about STDs or CT; for example, phrases like "You're in good company" were suggested for removal. Individuals also suggested that cutting out sentences that do not give factual information could help increase the font sizes. Participants liked the inclusion of factual information about the prevalence of STDs, asymptomatic nature of CT, outcomes of CT (e.g., permanent damage, infertility), and that free and confidential testing is available. Participants were interested in additional details about CT. They wanted signs, symptoms, and long-term outcomes, as well as statistics on the number of individuals with CT in their age group and the number of people who get screened. Others mentioned that they wanted to know where they can get additional information (e.g., toll-free number, website) and wanted to find out where to get tested.

Participants were mixed on the use of first person on the materials.

In general, participants provided negative feedback on poster content and calls to action that suggest that STDs and STD testing should not be taken seriously. Phrases like "no big deal," "get on with your life," or "don't stress" were disliked by many participants.

# 5) Sources

A number of participants, including about half of all the participants in the young adult groups, regardless of school/work status and race/ethnicity, agreed that the poster should come from CDC. These participants felt that it would be more credible and reliable if produced by an organization dedicated to researching diseases. However, one participant expressed her distrust of government organizations, and did not feel the poster would be produced by the government.

"CDC 'cause they're the ones who do the most research."

- Caucasian, 18–25, Work

"I don't think they would. It doesn't seem like they really care."

- Latina, 15-17

Teenager participants were less specific about which organizations should produce the posters; for example, some said that the posters should come from "a health organization" and "school." One African American teenage group suggested that the information could come from the "Local AIDS Council." A few participants suggested that women should design the materials.

Two groups were asked about faith-based organizations as a source of this poster. They did not expect to get posters about CT from faith-based organizations because many of these organizations focus on promoting abstinence.

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"I never heard a pastor talking about getting tested."
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"They only say don't have sex."

- African American, 18–25, Work

"I'm Catholic and I just feel like, this would not relate, the church would never advocate something like this."

- Latina, 18–25, Work

# 6) Channels and Formats

Participants expressed different ideas regarding where and how the messages could be distributed.

Magazine Advertisements. The most popular format for the posters, across groups, was magazines. However, young adult participants, regardless of race/ethnicity or work/school status, were more likely to mention the names of the magazines in which they would expect to see the posters. This included teen magazines such as Seventeen, Teen People, Teen Vogue, Vibe and Cosmo Girl. Other respondents mentioned health-related magazines such as Women's Health. Teenage Latina participants were also more likely to mention teen targeted magazines such as Seventeen as possible sources for these posters. One respondent suggested Essence magazine as a possible outlet, but indicated that the posters would have to be tailored to an African American audience. The participant did not mention how this could be done.

"If you have it in Essence, you have to make it more appealing towards African Americans."

- African American, 18–25, Work

*Posters*. Participants mentioned a number of places where posters could be placed. Caucasian and African American teenage participants were more likely to mention schools as a possible

place to find the posters, than Latina teenage participants and young adult student participants of all races/ethnicities. One teenage Latina respondent explained that she would feel uncomfortable seeing posters about CT in her school because it would lead her to think that someone in her school has CT and make her suspicious of others. The participant's comment (below) illustrates the blatant stigma associated with STDs, even after exposure to factual information about CT.

"I would just feel like sketchy, oh God, somebody in this school has chlamydia, and the teachers found out, so they're putting posters up. I just feel sketchy, like doubting everybody and I wouldn't wanna hang out with anybody."

- Latina, 15–17

Posters on public transportation (e.g., buses, bus stops, trains) were mentioned across segments. Many of participants said they expect to find the posters at their doctors' offices, clinics, Planned Parenthood, "women's organizations," and other health care facilities. One group mentioned coffee shops, such as Starbucks, as a possible outlet for the posters.

Television Commercials/Public Service Announcements. Some participants suggested that the messages could air as television commercials. A group of young adult Caucasian respondents in Atlanta, GA, preferred television to any kind of print media.

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"More people see it, if it is on TV."

"If it's on TV, if a teenager is talking to you, you would listen more."

- Caucasian, 18–25, School
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Participants mentioned that television channels such as MTV, BET, VH1, Nickelodeon, and Disney Channel could air commercials on the topic, as teens and young adults watch these channels. (Note that some groups were asked if they watch MTV. Teenagers reported watching MTV more frequently than those in the young adult segment.) In addition to these popular television stations, one group of Latina teenagers in Chicago mentioned other television stations where the posters can be seen as commercials, including WGN, ABC, and NBC. One teenage Latina in Dallas mentioned Spanish-language television as a place to air the messages in the posters.

*Pop-Up Advertisements*. Participants provided mixed feedback about the use of poster content as pop-up advertisements. Some respondents suggested having the poster messages, especially *Scan your hardware*, appear as pop-up ads on the Internet but some respondents indicated they would ignore such ads and consider them spam.

"I feel like a pop-up internet ad. If I go to a webpage and some ad pops up, I think I will see this."

- African American, 18–25, Work

"I would ignore it 'cause it looks like spam or something."

- Caucasian, 18–25, School

One participant indicated that she would like to see this kind of information on WebMD, while a group of young adult Latina students in Chicago would like to see it on Facebook and Twitter.

*Radio*. African American young adults, regardless of school/work status, were interested in receiving these messages through the radio public service announcement.

# C. Logo Designs

Overall, participants tended to agree on the logos that were their favorite and the logos that were their least favorite. Stand-alone text and images that were straightforward and needed no further explanation were the most popular. "Get tested" was the most preferred logo because of its simple message and the stick figures, which conveyed intimacy. One concern with the stick figures was that they might suggest that women need to be in a relationship in order for the message to apply.

The phrases "Knowing is everything" and "I know" resonated well with participants. They saw how these phrases could be used in a campaign.

Some participants recognized the "GYT" logo, and those who were familiar with it tended to like it more than the participants who had never seen it before.

The groups did not like vague text or phrases. "Get over it," "Scan it," "Think. Act. Be," and "It's all you" were unpopular across all racial/ethnic groups and age groups.

Several popular logos are discussed below in further detail.



The "Get tested" logo was the overwhelming favorite across most segments. This logo was crossed out (i.e., disliked) by very few participants. It was the favorite among Caucasian and Latina participants, and was the favorite along with the "Knowing is everything" logo with African Americans. Both age groups selected "Get tested" as their favorite. Participants thought the message was powerful and was a call to action.

Several participants, however, made comments about the use of hearts on the stick figure. There were concerns that the use of hearts made the message too "couply" and that it suggests that women have to be in a relationship. Some participants suggested exchanging the hearts for either the checks from "Check it" or stars from "Get over it." "Get tested" was the most popular logo across both age groups, but the majority of the comments about the hearts on the "Get Tested" figures came from the young adult group. The teenager groups did not bring up this issue. One group brought up concerns that the male and female figure leave out same-sex couples.

"I like just to get tested because it gets right to the point and it's just saying as much. I like little words."

- Caucasian, 18–25, School

"Maybe instead of hearts, you can have question marks 'cause you don't know what's going on down there until you get tested."

- Latina, 18–25, Work

"I like that one, just because it has the couple and saying that if you get tested, you're respecting your partner and it with the hearts which means obviously you love that person."

- Caucasian, 15–17



"Knowing is everything" was the second most popular logo with teenage and young adult women in almost every group. Although it was popular with all groups, it appeared to be just as popular as the "Get tested" logo with African American participants. Participants noted that it had a "pretty" font and they liked the font and bird image together. However, several people who liked the logo crossed out the image of the bird or placed a question mark next to it. One participant noted that the use of the bird was "random." Several participants said it looked like a logo for a beauty product.

"Knowing is everything and it's just something you can take with you throughout life."

- African American, 18–25, Work

"I like this one because when you look at the bird, you think of the bird as a delicate being. You think of your body as a delicate being."

- African American, 18–25, Work

"Kind of looks like a breast cancer campaign or something."

- Caucasian, 18–25, School

"I think it's too close to that beauty campaign, like knowing is beautiful."

- African American, 18–25, Work

"Yeah, you could fly away like a bird, it's like you're happy 'cause you know, you have information that you've been waiting for."

- African American, 18–25, Work



The "Check it" logo is the only other logo that was consistently a favorite. It did not receive any suggestions for edits from the participants, but one noted that it reminded them of the "Click it or Ticket" campaign that encourages people to buckle their seatbelts, and others said the checks remind them of the Nike brand. This latter similarity was perceived positively by several participants, who liked the Nike brand and said it caught their attention. Participants believed that by combining the text with the image, they knew that this logo was about getting tested for STDs. When the groups are divided by race/ethnicity, this logo was more popular with the Latina groups than the "Knowing is everything" logo, and "Check it" was not quite as popular with the African Americans.

"I like the placement of the check. It'll be more easily understood than some of these."

- African American, 15–17

"I like the checks the best because as a logo, I think it can stand on its own. You know what it's about just by looking at it."

- African American, 18–25, Work

"It reminds me of Nike. I just like Nike a lot, so I'm going to notice that check mark anywhere."

- Latina, 18–25, Work

"I liked it, I was saying, because of the placement of the check. I think that people ought to look at the logo first of all because it reminded them of Nike or something like that. Then they would see the people on that. It's not humorous, but you get it. It'll be more easily understood than some of these."

- African American, 15–17

### D. Brochure/Factsheet Content

Across all content, participants liked that the information was straightforward and easy to read. The three prototypes for brochure/factsheet content began and concluded with the same general information about CT. Feedback from all groups is provided in this summary. Some of the young adult participants thought that the materials did not need to use the word "girls"; rather, they could just say "young women." None of the teenagers commented on the term while reviewing the content. Similarly, some women suggested replacing the word "babies" with "children."

"I like the first two sentences. The comment about if it has no symptoms and it's easy to treat and cure. I think that's a good start for anyone who's worried about it."

- Caucasian, 18–25, School

I know that we're targeting 15 through 25. I think that if they're old enough to have sex and to worry about Chlamydia, that calling them girls could be offensive. I think young women would include them too."

- Caucasian, 18–25, School

"I still don't like the way they say 'unable to have babies.' Why don't they just say infertile? It sounds like they're talking to kids. That says like giving urine sample, peeing in a cup. We know what a urine sample is. We're not stupid.")

- Latina, 15–17

Several women suggested removing or revising the phrase "It is easy to treat and cure" because it suggests that CT does not need to be taken seriously.

"It's easy, it can be cured or whatever 'cause you'll say 'oh I got chlamydia oh but it can be cured though'"

"'Cause I get cured and say hey, I'll take a chance."

- African American, 18–25, Work

Several women removed the words "every year" from the phrase, "That's why sexually active girls and young women need a chlamydia test every year." It was unclear how frequently an individual needed testing and whether yearly was frequently enough.

One participant noted that she liked how "chlamydia" was spelled out phonetically.

# 1) Basic Chlamydia Information

Participants who reviewed the *Basic* content described the content as "good," "straight to the point," and "clear." One focus group of African American teenagers in Atlanta considered the *Basic* content trustworthy because the materials were able to answer the questions logically.

"I like this. It's straightforward and it pretty much says a lot of common questions that you might ask about chlamydia. That's pretty good."

- Latina, 15–17

"I like that is was real specific like the treatment and stuff. I like that it was really specific and telling you how you have to finish all your antibiotics and to wait at least three to four months. There will be specifically timing and everything like that and details."

- African American, 15–17

"I think it's pretty good. It gives you pretty much the general stuff you probably want to know, the how, what, when, where, and why type of thing."

- Caucasian, 15–17

"I think this also good information that we read that we can also help somebody else. If somebody does not know about chlamydia, like some of us didn't know when we came here, now we can be able to be confident saying this is what we know, this is how it looks."

- African American, 18–25, Work

Although respondents liked the content, a number of focus groups reported that information about boys and men was missing from the materials. Some women were offended by the statement that "sexually active girls and young women" needed CT testing, because the language suggested to some participants that women were in need of STD testing and men were not. Women also thought that information about the symptoms and impact of CT on men would be helpful.

"I don't like any of the words in sexual active girls and young women. We do a chlamydia test every year ... Where are the guys? It has nothing to do with the guys."

- Caucasian, 15–17

"The guys' part [is missing] because it's all about women."

"What happened to the guys?"

- Latina, 15–17

"Are these symptoms only for girls? Because I know boys don't like to bleed out of their stuff!"

- African American, 15–17

### "How common is chlamydia?"

Participants liked the use of statistics in the content showing how many people are impacted by CT. One group of women mentioned that they wanted more statistics in the content.

"It actually has facts, like over two million Americans are infected with chlamydia. I like the facts because it makes you think that maybe you're one of those."

- Caucasian, 15–17

"The only thing I circled in that is how common it is, because there are two ways of getting infected. I think it would be good to include like how many get infected every year or to say do we Americans have it and then how many get infected every year."

- Caucasian, 18–25, School

#### "How could I get chlamydia?"

Participants liked the detailed information presented in the content about transmission, but considered the information about oral sex to be vague and uncertain. Respondents were interested in learning that CT could be transmitted through oral sex. Several women were frustrated by the tentative nature of the oral sex information, which stated that little is known about the transmission of CT through oral sex. They suggested it be removed as it limits the credibility of the source as an expert, and puts the rest of the information into question.

"Yeah, I think it's probably what it says, it's possible to get chlamydia from oral sex because a lot of people think okay, well, it's a STD, so if I have sex with someone that's how I'm gonna get it. I can't get it any other way, which a lot of people do think that way. I think that's kinda good thing."

- Caucasian, 15–17

"It's all about the health effects of oral chlamydia. I don't think they should really say that. I think they should put it out there that it is possible, but they shouldn't say they know nothing about it. Because I'll be like, oh, okay why you're telling me you know nothing about it?"

- Caucasian, 15–17

"Not scary. When you're reading a brochure, you expect it to be informative. When something says we're not sure, that doesn't make me feel good."

- Caucasian, 18–25, School

# "What are the symptoms of chlamydia?"

Participants appreciated the details in the content about symptoms and considered that information very useful.

"You didn't know something like that [CT] can give you all these symptoms."

- African American, 15–17

"I like the part where it is educating you on the symptoms. There's not like a bump or itch all the time. You just notice small things, little stuff like bleeding after sex."

- Caucasian, 18–25, Work

Participants provided mixed feedback on the use of formal and informal language in the materials (e.g., "urinate" versus "pee"). Some participants were offended by the use of the words "pee" and "butt" instead of "urine" and "rectum," which suggested that they did not know what the words "urine" and "rectum" meant. However, for some audiences, the use of plain language and explanations may be important. For example, one or more participants indicated (either during discussions or on their marked-up copy) that they were confused by words such as: discharge, ectopic pregnancy, and douching.

"I put an exclamation on the peeing because I think that we can use the word urinating. Peeing is a word like a six-year-old uses. I don't know. If this was supposed to be a legit document, I don't know."

- Caucasian, 18–25, School

"Yeah, I crossed out butt and babies because you could say children and anal or rectum. If you're having sex you know where your rectum is. I would hope so."

- Caucasian, 18–25, School

#### "How do I treat or cure chlamydia?"

Participants had mixed feedback about the "treat or cure" section of the *Basic* content. Women were interested in learning how CT is treated, but were unclear about how CT is cured. Respondents noted as unclear the phrase, "Also, if you still have symptoms after treatment, go back to the doctor." The statement was considered confusing and suggested to some individuals

that antibiotics may not be able to cure CT. One participant thought that the information in this section contradicted the content explaining that CT did not frequently have symptoms.

"I have a question though. It's under how to treat or cure. It says, don't stop taking treatment. You may start to feel better. Does that mean you felt bad before and is so... because if you don't have any symptoms, it made me wonder if you even get sick from having chlamydia."

- African American, 15–17

"Also, the bottom part about, if you saw symptoms after treatment, go back. I guess it's good to tell people that, but I feel like that's common sense that they would do that. I guess you can't assume that people at least think the way you do."

- Caucasian, 18–25, School

"I circled the, 'also if you start seeing symptoms again, go back to the doctor.' You could, even if it's cured, some symptoms could stick around. Do the antibiotics not work?

- Caucasian, 15–17

Some participants also remarked that describing the treatment as "easy" could suggest that CT could be taken casually.

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"I don't like where it says easily treated."
"Like it's okay. I'll just have it."
"That's okay. Yeah, it's easily treated."
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- Latina, 15–17

# "What happens if I don't get treated?"

Participants, especially Caucasians, liked the information presented in the "what happens" section of the content. Women were specifically interested in learning that "having chlamydia makes it easier to get and give HIV." Participants were also interested in learning about the science behind the previous statement. Some participants considered the two sentences about HIV to be repetitive. Some women were unfamiliar with "ectopic" "and "pelvic inflammatory disease."

"I like that it said having chlamydia can make it easier to get HIV or AIDS. It scares me to think that if I have this [CT], that I can get this [HIV]."

- Caucasian, 15–17

[Did anything in the brochure shock you?] "Lots with the HIV. I didn't know that chlamydia makes it easier to get HIV."

- Caucasian, 18–25, Work

"I want to know how it makes it easier to HIV because everything that I've always learned about HIV is that you have unprotected sex with somebody who has it and that is why you get HIV."

- Caucasian, 15–17

"For the box on the back about easier to HIV and AIDS, I think it's fine but I think that those two sentences say the exact same thing."

- Caucasian, 18–25, School

### "Can I get chlamydia again after I've been treated?

Participants did not provide much feedback on this section, either during focus group discussions or through their mark-ups in the written activity. One woman was confused by the discussion of how an individual can be reinfected with CT; she assumed that it meant that antibiotics may not clear up the infection.

"I don't like that you can get chlamydia again. It doesn't say that once you are treated for it, it's gone for life. You'll get it again so you keep getting tested."

- Caucasian, 15–17

# "How can I lower my chances of getting chlamydia?"

Participants were frequently confused by "the right way" as stated in the phrase "using condoms the right way every single time you have sex." Without specific information about what the right way is, they explained that this information is not helpful.

Women across segments crossed out and were offended by the inclusion of "the surest way to prevent chlamydia is not to have sex." This statement was considered unnecessary, condescending or offensive by many participants. Some pointed out that it was likely there for political reasons.

"It said the surest way to prevent chlamydia is to not have sex. I thought it was pretty stupid to put that on there. Someone's gonna be like 'Oh my goodness, chlamydia. I'm never gonna have sex again.' I think that's pretty dumb."

- Latina, 15–17

"The surest way to prevent Chlamydia is not to have sex, that's really tough. I don't know. It's a free country; you can do whatever you want. You cannot say this is the safest way because we all know that. We all know, we don't have sex, we won't have anything. For me that was unnecessary."

- Caucasian, 18–25, School

"I know they always put something like that, and just because it makes the people who don't want us to have any type of information about STDs happy. Because it's, it makes the people who were like, what, 'abstinence only.'"

- Caucasian, 18–25, School

One participant noted that it was obvious, but not offensive, as there may be some people who do not understand how STDs are acquired.

"I don't think it's using a moral high ground. I have sex and I'm not offended by it. It just kind of, you just think. There's so much bad information out there that I think they would think, 'I can get [it] from a toilet.'"

- Caucasian, 18–25, School

### "For more information"

Participants liked the inclusion of a phone number and website, although some participants did not notice this information in the content.

"It's very helpful because they give you ways to find information. They just give more information like talking about that phone number or the website."

- African American, 15–17

# 2) Talking to your doctor

Participants thought the information was simple, direct, and easy to read. Most participants liked the content about how they can find out if they have CT but had concerns about the other sections. Both age groups had some confusion about the information in the section, "When should I be tested?" (described below). Young adults were more concerned about the tips section and whether it is relevant to them, but they thought the content was more useful for teenagers.

"Very easy to read. 'Cause the way the words were put out. You didn't have to think 'what does this word mean?"

"Interesting, too."

"Basically it answered all my questions."

- African American, 18–25, Work

Participants felt that there was repetition in the information and that it could be eliminated. One participant noted that repetition about the need to get tested was trying to "force" readers to get tested. Although many mentioned unnecessary repetition, there were some participants who felt it was necessary to repeat important information.

"Don't assume you're being tested, don't assume you're being tested, don't assume you're being tested. Okay, we get the point. They just put in there way too many times about we need to go get tested. I thought that was way redundant."

- Caucasian, 18–25, Work

I like how they keep saying that you need to ask your doctor and you can't assume that you're being tested because I would think a lot people assume that your doctor's doing that."

- Caucasian, 18–25, Work

"I think they should cut out some of the [repetition], they were reinforcing it like all through other thing. I feel like they're kind of forcing you to do it [get tested]. Just like somebody just constantly telling you do it, do it."

- African American, 15–17

One participant was appreciative of a lack of message about abstinence. Others were interested in hearing about ways CT is transmitted in same-sex relationships.

"I wouldn't want the thing to be condemning sex 'cause they're trying to force on you, don't have sex or you can have Chlamydia. Kids have sex, so they might as well just say like, you should go get tested for Chlamydia."

- Latina, 15–17

"I have a lot of friends that are dating girls. Is this just in guys and girls?"

- Latina, 15–17

## "How can I find out if I have chlamydia?"

Participants said that they learned new information in this section; they learned that the Pap test does not screen for STDs, that CT testing could be done with a urine sample, that they could get STD testing when they get their Pap smear done, and that doctors do not automatically test for STDs.

"I think the brochure was the best part. 'Cause I didn't know that when you go get a Pap smear for HPV. That it's not automatic that you test me for Chlamydia and all that kind of stuff. I didn't know that part. I didn't know it didn't have any symptoms."

- African American, 18–25, Work

"A lot of people, they're probably like, 'oh I really don't wanna get tested for STD 'cause I don't know how the testing procedure is and I'm not really cool with needles and whatever." This is telling you, they're just gonna swab you and you could pee in a cup, whatever."

- African American, 18–25, Work

"I like that this could be done during your pelvic exams. So it's like, 'oh, also I should get this done too when I get that,' so it's not out of your way, so you don't have to go out of your way to go get this testing.

- Caucasian, 15–17

Participants mentioned that the testing procedures did not sound pleasant. Some even said the description would turn them off from reading further. Participants thought that "peeing in a cup" was unnecessary and insulting of their intelligence in the phrase "giving a urine sample (peeing in a cup)."

"The swabbing your vagina part. Some people would be like, I don't wanna do that. It's a good thing that they offered like giving urine samples. It's a good thing that they have different ways that you can get tested."

- Latina, 15–17

"I didn't like where it said, some of the testing parts 'cause I just thought it sounded uncomfortable, so if I were reading, I would stop reading."

- Latina, 15–17

"If put like where it says like peeing in a cup, I think urine sample is clear that you have to pee in a cup. (Laughter) It's like restating it twice and making you feel stupid."

- Caucasian, 15–17

One participant was confused by the words "cervix" and "pelvic exam." Another participant was interested in learning how men are screened, and whether they can get a swab test.

### "When should I be tested?"

Participants were somewhat confused by the breakdown of ages presented in this section and wondered why so much detail was included. Some felt that age did not matter. One participant was offended by "older than 25 and you're having sex with more than one partner" because it suggests a woman is promiscuous.

"I don't like how they said it, if you're older than 25 and having sex with more than one partner, it kind of makes you cautious, it's kind of make it sound like you're a tramp. They could have put like the one partner or like a new sex partner together."

- Caucasian, 15–17

"Yeah. I liked that it had the guidelines like how it says if you're older than 25, you should get tested, who should get tested and why."

- Latina, 15–17

Others were confused about whether CT does or does not have symptoms. The phrases "even if you don't have symptoms" and "having sex with someone who has chlamydia or symptoms that could be chlamydia" were considered conflicting. Further, some thought it was strange that someone would be having "sex with someone who has chlamydia." This lack of clarification about symptoms caused a woman to consider that individuals can be a carrier for CT.

"I think there was one line that contradicted itself. In the beginning, it says 'Chlamydia is common and often has no symptoms.' Having sex with someone that has Chlamydia or symptoms that could be Chlamydia, kinda contradicted itself. Then it says Chlamydia has no symptoms. It makes no sense."

- Latina, 15–17

"Maybe they put that because some people, sometimes you can carry something but you cannot have it and you give it or something..."

- Latina, 15–17

A few participants were reassured by the list because they believed that it was clear about who needed testing.

"It was important that [list]. You should get tested if you are on this list at this point in time."

- Caucasian, 18–25, Work

# "How do I bring up testing with my doctor?"

Many young adult participants frequently crossed out the content in this section. These participants found it unnecessary to provide three bullet points about doctors preaching to their patients. It suggested that women will be preached to. Others thought that it was not a doctor's job to keep someone healthy, but rather that it is the person's responsibility.

"Another important thing is that doctors don't judge you for the things you have done and that you should really be honest, be really honest, so they can treat you better, but I think a lot of girls kinda feel like, 'oh, if I go in there they're gonna judge me or this or that."

- Caucasian, 18–25, Work

"I actually think that's important really because when you're 16, 17, you still probably going to your long time doctor."

- Caucasian, 18–25, Work

Participants liked that it suggested you find another provider if you do not like your current provider and that it provided a website to find one, although some suggested including a phone number since everyone does not have Internet access.

"I think it's important to know that if you think your doctor's judging you, you need to go somewhere else."

- Caucasian, 18–25, Work

"I love that [the website]. That is another of my favorite parts... Because a lot of these ads, it says like you can go to a free clinic that's right around the corner, but it never tells you like where."

- African American, 15–17

#### "Tips for talking to your doctor"

Young adult participants considered this section unnecessary for them, but useful for teenagers. Teenagers mentioned that it provided useful content but participants across age groups crossed out content in the section.

"I like the tips about talking to your doctor. Young people, sometimes they feel embarrassed to talk to doctors about certain things. It makes you relate. Don't be shy. Doctors won't judge you and stuff like that. It makes you relate especially at least for young people."

- Latina, 15–17

"I thought the tips, like if you're nervous or embarrassed, if you just write it down, I never really thought of that. I guess it's like a good tip for people who are really shy and don't feel comfortable talking about it so much. I just write it down and give it to the doctor."

- Caucasian, 15–17

A few participants noted that there should be more tips provided. Many participants liked the tip suggesting that you write down a request for a CT test and give it to your provider. However, a minority crossed it out. Some explained that physicians should change their practices to facilitate testing, rather than putting the onus on the patient to ask for a test. Suggestions for changing provider practice included having the front desk ask about testing, for doctors to emphasize that the appointment is confidential, or for doctors to make testing routine.

"It really only said one way, then at the very bottom says, to write on a piece of paper. The other three bullet points under that were about not being shy and not thinking people are gonna judge you."

- African American, 18–25, Work

# 3) Talking to your partner

Participants were split by age on their reactions to this section. The teenage participants were generally positive about the content, while the young adults thought it was unnecessary.

"I think it's really good. It doesn't just tell you what to do to get tested. It shows you how to handle it emotionally and what to do when things get out of hand. It's just everything."

- Caucasian, 18–25, School

"There's something I like on the first part, it said how could I get Chlamydia, but then the rest, tips about talking to your partner is unnecessary because I'm gonna choose how to do it. That's unnecessary information from my perspective. Personally, I wouldn't read that."

- Latina, 18–25, Work

Specifically, the teenage participants thought the content was helpful for talking to their partner. Young adults considered the information unnecessary because it addressed personal and psychological issues, which they could handle on their own or that are better managed in a conversation. One young adult participant mentioned that this information could be contained to half of a page. Although the young adult groups did not like the content, one of these groups thought it was soothing.

"Some people don't want to talk about it 'cause I think Chlamydia means you're dirty or you're a slut or something. If they have it, they just pretend that it's not there and ignore it, and they don't wanna tell their partner. I think this is just helpful 'cause it tells you, that talking about it isn't as bad as you think it's gonna be and thinking about it is more stressful than, it's gonna be. It just helps you stay calm and deal with it."

- Caucasian, 18-25, School

"Some things were too personal, like find the time and quiet private place for discussion. I feel that's like kindergarten, like quiet time. You already know that. Then other things, like try not to feel hurt or jealous like that, and then if your partner tells you about an STD don't accuse him. Some of those things, I feel are too, to me, like a psychiatrist will tell you. It's too personal, like your relationship. I think you should maybe just stick to the facts. I liked the facts."

- Latina, 18–25, Work

"I just think we don't need it this long. It could be three or four bullet points." "I feel like it's kind of repetitive also. It mentions a lot of, first the tips about talking to your partner and getting tested. I was like 'oh, that's good' but then it tells you tips about telling your partner you have Chlamydia.

- Latina, 18–25, Work

One group of young adult participants noted that the content focuses on CT prevention, but that the poster concepts do not address the topic.

Several participants, most in the young adult segments, thought that language should be inclusive of same-sex relationships and include the word "partner" instead of "boyfriend." Further, many participants were looking for more information about men.

"I guess to have sex, you don't really have to have sex with your boyfriend. It could be like sexual partner."

"I guess this kind of covers people who are homosexual. Even though you're with girls, you can still get it."

- Caucasian, 18–25, School

# "How could I get chlamydia?"

Participants across age groups liked most of the information in this section. They were interested in learning the ways that CT is transmitted. Several participants discussed the phrase "you can get chlamydia from a steady boyfriend, just as you can get it from a one-night stand." A few participants believed that the phrase "one-night stand" has negative connotations and suggested it could be written differently. Other participants did not agree that an individual "can get chlamydia from a steady boyfriend." One young adult participant wrote, "I trust my boyfriend and he wouldn't have it, so I don't trust the ad."

"I underlined the whole thing under how can I get Chlamydia 'cause it goes with even if you only have one partner, you can't still get it. You don't have to be a slut to get a disease, and you just need to be conscious about that."

- Caucasian, 18–25, School

"I think that it shows how easy it is to get it so you should get tested, because it says from boyfriend or a one night stand like. It doesn't have to be a lot."

- Caucasian, 18–25, School

"I don't like it. I don't like the part where they're saying like, you can get Chlamydia even if you have a steady boyfriend. What if you have a faithful boyfriend? How could you get Chlamydia from that?"

- African American, 15–17

"How do I talk to my partner about getting tested for chlamydia and other STDs?"
The teenage segments generally reacted positively to the content in this section, while young adult participants did not feel they needed help talking to their partner.

"If you're really kind of scared to talk to your partner or whatever about it, then [the tips] will help you a little bit. [They tell you] about how to do it."

- Caucasian, 15–17

Some individuals felt that the following sentence was manipulative, "One way to start the conversation is to tell him that you feel your relationship is ready to move to another level (sexually).", These individuals felt that some people would use sex to pressure their partner to get tested. However, many teenage participants underlined this statement to suggest that it was important.

"It's kind of like you got to talk your partner into [testing]. 'I'm ready to do this with you sexually, you should go get tested.' It's like why should you have to do all that instead you just have to come out and say 'I think you should go get tested, I'm gonna go get tested it's a good idea to make sure neither one of us had anything' instead of saying, 'well I think our relationship is ready for this, this, this, this and this.'"

- African American, 18–25, Work

Participants, for the most part, liked the reminder that "you may want to rethink your relationship."

"I like the last bullet; I think you should underscore that. The last bullet of the partner section. Like your partner, if they refuse to talk to you more that's problematic"

- African American, 18–25, Work

"If I have chlamydia, what does that mean for my partner?"

Participants in both groups had little feedback about this section. It was generally considered important information.

### "How do I tell my partner I have chlamydia?"

Participants remained divided on this section. Teenagers thought it was useful while adults thought it was unnecessary or overly personal and emotional. Teenagers underlined phrases in this section while young adults frequently crossed out the bullets that started with "find a time," "stay calm," and "remember that chlamydia can last a long time." Some participants crossed out the last statement, "End the conversation if it does get out of hand. Tell your partner you would like to talk more at another time."

"I think that's the best part because sometimes it's hard for you to talk to your partner about STDs and stuff. You'll never know if they'd get offended."

- Latina, 15–17

"I'm not a fan of it telling me how to talk to my partner, period. I ex'd all that stuff about how to talk to your partner, how to tell him, know your information so you can answer questions, not like his."

- Latina, 18–25, Work

# 4) Channels

#### **Channels of Information**

Most participants said they expect to find brochures about CT in their health care providers' offices, regardless of race, age, and ethnicity.

Teenagers and young adult students also expect to find information at their schools. Some teenage participants want the information distributed in their health or sex education class, or at their school's front office.

"Say like you're in health class. It can be handed out."

- Caucasian, 15–17

"Like the front office... I just like hanging out there."

- Caucasian, 15–17

Participants added that they would like to hear talks by someone who had experienced CT at school.

"...It's more interesting when somebody who knows about it, talks to you about it..."

- Latina, 15–17

"Maybe someone that's been through it..."

- Latina, 15–17

Other locations mentioned with less frequency included sex shops and adult video stores (mentioned by young adults), non-profit organizations, CDC, and NIH. A young adult group in

Chicago also mentioned local non-profit organizations such as The Robert Crown Center and Howard Brown Health Center.

"If it is from a reputable source such as the NIH or the CDC or some source that is non-biased."

- Latina, 18–25, Work

Individuals in one group said that they would not trust the brochures if they came from pharmaceutical companies or anyone who would profit from selling a drug or vaccine. One participant talked about getting information at her doctor's office from Merck and Gardasil.

"That kind of threw me off and made me kind of distrust the information as it was."
- Latina, 18–25, Work

#### **Format for Content**

Participants suggested using the content on informational sheets, similar to those found in doctor's offices. Other formats for the information included brochures, television announcements, and newspapers.

"Maybe those little sheets that the doctors give you after you get tested."

- Caucasian, 15–17

"Or like the doctor's. They have a lot of those kinds of stuff."

- Latina, 15–17

Other participants would like to see the information on websites such as WebMD, Wikipedia, and Facebook. They would also like to be able to do a Google search to find this information. However, a few participants indicated that the internet would not be a good source for the content.

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"...just Google the word and then 50 line sites pop up at you."
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- Caucasian, 15–17

"WebMD is the first place I'd go for information like this."

- Caucasian, 15–17

"[Facebook] would be a great place to catch our eye. Using something that everyone en of all ages, guys, young girls, all nationalities are on."

- Caucasian, 15–17

"Yeah, I can see it in Internet content."

- Caucasian, 18–25, School

"Nobody would look at it online though."

- Latina, 15–17

# E. Public Service Announcements

Nine public service announcements from existing and past campaigns were examined to assess different approaches. Below is a summary of respondent reactions to the various approaches reflected in the PSAs.

#### Humor

When the respondents were asked about using humor as a general approach, some women, particularly teenagers, thought humor made it easier to discuss serious or difficult things. Respondents also thought humor could make difficult situations easier to relate to and easier to discuss. Some respondents thought that the use of humor would get people's attention.

"I think that humor makes it a little bit easier a topic to have people take in and talk about because somehow in uncomfortable situation, people are gonna try to avoid it, but if you give them something that they're gonna think is interesting and funny, they'll pay more attention to it."

- Caucasian, 15–17

"The humor, I think it works better. It makes you more comfortable. It doesn't make it seem so serious."

- African American, 15–17

"I think that with most kids when we talk about that stuff [STDs], everybody once you get to elementary school, high school, we talk about that kind of stuff. They think it's funny. With the commercial making it funny will make it easier for the audience to relate to it."

- Caucasian, 15–17

"It was funny but it was serious at the same time."

- Caucasian, 18–25, School

A small number of women thought the use of humor would make the act of getting tested for STDs seem less serious by diminishing its importance.

"Usually funny things are not [more]. It's just funny. That's it. It doesn't make you wanna take something serious. Health to me is something important, not just funny."
- Latina, 18–25, School

### **Inclusion of Celebrities**

When asked about the use of celebrities in a PSA, some respondents thought celebrities would get people's attention and add a sense of familiarity to the video. The effectiveness of the PSA with a celebrity seemed to depend on the perceived reputation, credibility, character traits, and popularity of that celebrity.

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"They [celebrities] get your attention with their beauty."

"People see that they're doing it, so they'll be interested in them."

- Caucasian, 15–17

"[Celebrities, it] makes you watch it more, I guess."

"Yeah, because they look familiar."

"People look up to them ..."

- Caucasian, 15–17
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Some women thought that celebrities seen as being trustworthy or inspirational could be influential. When asked which celebrity they would like to see in a PSA, Beyonce was mentioned several times by Latinas and was considered confident and powerful. A small number of individuals thought a celebrity was unnecessary and would not be motivating, but they did want to see relatable women who exuded strength and confidence.

"Like I said, you need someone who looks confident. A confident person would be like Beyonce."

- Latina, 15–17

"I don't get tested just because Common told me knowing is beautiful."

- African American, 18–25, Work

"What she said, you need a strong woman to empower us. It doesn't even have to be an artist. It's just like regular women because I can't relate with Beyonce. I don't have a million dollars and my boyfriend isn't Jay-Z. Like you're working, you just have someone simply saying the serious things, and that would work, not just some celebrity."

- Latina, 18–25, School

#### **Inclusion of Men**

Overall, participants reacted positively to the use of relationships in the PSAs. Women thought the use of relationships made the videos more "personable," making the PSA seem "relatable," "reassuring," and "comforting." Relationships were seen as encouraging, and motivating to all women, not just those currently in a relationship. Women also appreciated that the men in relationships were portrayed as being devoted and concerned about their partner.

"The commercial is just too... you know when you're in love. You feel safer to know both of you are tested and just to see them embrace, it gives you a peace of mind, too."

- African American, 18–25, School

"Yeah. It kind of gives you a sense like wow, that's really beautiful and you're imagining yourself in a relationship. To protect that relationship you want to be open with each other and you want to do something like get tested."

- Latina, 18–25, Work

"I think single people can still relate to it because it [will] probably happen in a relationship. They're probably planning on being in a relationship. I think they can relate to it anyway if they are not currently in one."

- Caucasian, 18–25, Work

Relationships also reminded some women that even if they are in a committed relationship, women are still at risk for getting STDs and should get tested.

"Because a lot of people think that, oh, I'm just messing with this one person so I'm not gonna get anything. I love him and he loves me so much but that doesn't stop what he had before he starts sleeping with you or even if he cheated on you... A lot of people, they don't get that, they cheat on people but don't use protection. That is so stupid."

- African American, 18–25, Work

"The women who were talking about their boyfriends and being loyal. I like that one. They were kinda showing us how their relationship was and still saying, 'Okay. Yes, he's this and that, but I still need to get tested regardless' because you don't know his background or who he's messed with in the past."

- African American, 15–17

"It has nothing to do with being in a couple or being with somebody. You're still having sex and sex is what gives you chlamydia."

- Latina, 18–25, School

#### **Inclusion of Different Races/Ethnicities**

Women across all groups reacted positively when women and men of multiple races and ethnicities were highlighted in the PSAs. The use of multiple races/ethnicities in the videos was considered an inclusive approach, and made the PSAs more relatable to the viewers.

#### **Use of Emotion**

Most women reacted positively when asked about the use of an emotional appeal in the PSAs. In general, participants felt an emotional connection with the positive portrayal of love, intimacy, and relationships in the ads. A few women felt this approach was effective because it appealed to young women through the use of romance and the inclusion of positive relationships.

"I think the emotional approach works well and having people that are in relationships works well too... I think it's just more real that way."

- Caucasian, 18–25, Work

"I like the emotional approach I guess because I'm a female, I tend to go more towards emotional."

- Caucasian, 18–25, Work

"I like the intimacy, it's private ... if you're gonna get tested it might be because you're with a partner and they ask you to or you say or have discussion, 'hey, I have respect for you, let's get tested."

- African American, 18–25, School

#### **Acted/Scripted Scenes**

PSAs with acted scenes received positive reviews from participants. Acted scenes were seen as relatable. However, PSAs that appeared to be personal testimonials were preferred. Young women related this approach to reality TV that they commonly see. PSAs that presented information without context/storyline were not as popular as those with acted scenes.

# F. Online Testing

Some teenagers and young adult student groups expressed interest in an online testing kit for CT that could be sent to their homes. Some respondents indicated that they would be more comfortable using a self-collected sample test than going to the doctor. Others liked the option of getting it shipped to their homes or that the test was free.

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"That would be less nerve-racking than to have to ask the doctor."

- Latina, 15–17

"To me, I would do it because I don't like anybody down there."

- African American, 15–17

"I kind of like the send it to your house deal."

- Caucasian, 15–17

"Yeah, it's free, why not?"

- Latina, 15–17
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Although few of the participants said they were not interested in this option, they had many concerns including confidentiality, reliability, waiting period, and cost.

Many participants were concerned about the kit being mailed to their home, especially about the possibility of their parents finding the test in the mail. Some participants suggested making the test available at free clinics such as Planned Parenthood, schools, and retail stores (for a low price) so they could prevent their parents from finding out. One participant suggested distributing the kit at community events such as Taste of Chicago, Market Days, and the Pride Parade.

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"Some parents open their kids' mail..."

- Caucasian, 18–25, School

"I hear of people, their parents might be like, 'What is that?' They don't want their parents to know."

- Latina, 15–17
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Respondents who suggested the kit be made available at retail stores (e.g., Target, CVS, Holt's Warehouse) also indicated that the package should not be too obvious.

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"Yeah, but it needs to have some kind of covering so it doesn't just say STD when you are in line..."
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- Caucasian, 18–25, School

Some participants were concerned about collecting the specimens incorrectly or accidentally altering their results. Other participants wondered if a free test could be reliable.

"You could mess something up and make your results come back altered."

- African American, 15–17

"You really don't know what you are doing."

- Latina, 15–17

"You'd also wonder if it was legit because it's free."

- Caucasian, 18–25, School

Some participants were concerned about how long they would have to wait to get their results in the mail.

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"I don't want to just wait... I want to get it [the results] right then and there."
- `African American, 15–17
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One group stated that they would like to receive additional information (e.g., how to collect the sample) on the test by phone or on the Internet.

#### G. Website Features

In all but three focus groups, participants were asked to brainstorm types of interactive features they would want to use on a website about CT. Each group made a list of items that they would want to have, including features and types of content. Some groups mentioned a feature that they would prefer not to have on the website. A comprehensive list of suggestions can be found in Appendix G.

Participants reported that they would like a website to provide detailed information about CT, including symptoms, statistics, treatment, prevention, tips on talking to your doctor or partner, and detailed information about how CT affects your body.

A few overarching suggestions were included. The website should not have "too much text" or "lengthy paragraphs." Participants would like the website to have short paragraphs or bullets and bright colors.

There were several suggestions that came up in all race/ethnicity and age groups. One of most common was to include a tool that helps users identify a local clinic. Participants across segments also wanted a frequently asked questions (FAQ) section. Personal testimonies from people who have had experience with CT were also popular. Participants would like to access these stories in the form of blogs, short videos, interviews, or chat rooms. When asked, most participants stated that they would post information on the website if it were anonymous. Participants across all ages and races/ethnicities mentioned including celebrities on the website.

Other ideas mentioned less frequently were to include quizzes and polls, to have a place for people to chat with or submit questions to a health professional, have a different section for males and females, and to include links to other resources.

Two African American focus groups brought up the idea of a hotline or including a hotline to contact for more information. Other suggestions that were unique to the African American focus groups included inspirational quotes, a public service announcement/video, and including information on what infected individuals should do after they have been diagnosed with CT.

The idea of using pictures of people infected with CT or of the disease itself came up once in Caucasian and African American groups and four times with Latina groups. Several groups mentioned wanting to see before and after pictures of genitalia infected with CT. One group made the comment that there should not be any graphic pictures on the main homepage.

The most common feature that participants reported not wanting to see on such a website was games. There was only one focus group (teenage Caucasians in Chicago) that mentioned games as something they would like to see on a website. Participants were mixed across age and racial/ethnic groups on whether they would be interested in participating in contests where they are asked to create something (e.g., poster, video).

## VI. Recommendations

The research demonstrates that the project can develop concepts, content, and images that appeal universally to the CDC's priority segments, especially if they feature diverse races/ethnicities, ages, and lifestyles or stages among the models. Age appeared to be the greatest determinant of audience preferences for concepts and messaging, but some materials were found to appeal to both younger and older participants.

The goal of this campaign is to promote CT screening among sexually active girls and young women. The following section provides recommendations for a CT-related infertility prevention communication campaign for girls and young women. It begins with general recommendations for a campaign approach, followed by overarching recommendations for concept and materials development, and recommendations for developing specific materials. The section concludes with recommendations regarding online testing kits. Recommendations are based on feedback across segments unless otherwise noted.

#### A. General Recommendations

## 1) Approach

For young female audiences to pay attention to CT and consider behavior change (seeking screening), the approach and messaging must be thought-provoking and take CT seriously, linking the desired behavior to the achievement of their life aspirations. Campaign materials (e.g., print, visual, audio) should build upon aspirational/empowering/emotional and light-hearted approaches. This could include messages that normalize testing and provide realistic testimonials.

# 2) Focus of the Campaign: Messages and Audiences

Teenage and young adult women are familiar with STDs but have very little knowledge of specific STDs, including CT. When asked about their preference for a campaign focus, their reactions were mixed between "STD" and "chlamydia," but slightly favored "chlamydia." Overall, CT was of greater interest because of its novelty and potential to cause infertility. However, those who supported a more general approach felt the term "STD" was more universally recognized, and pointed out that women would be unlikely to request a CT test (as specified in the call to action); rather, they would be inclined to ask more generally for an STD test or to discuss their sexual history/health with a provider. This research provided inconclusive evidence on whether female audiences would actually be more or less willing to ask for an STD test than a CT test, though a general "get tested" message did resonate with almost all participants (in logo exercise). That said, no logos specified CT in their messaging.

#### Option 1: Focus on CT, Infertility, and Women's Health

Given that CT provides novel information that is interesting and attention getting to women, option 1 recommends focusing on CT and infertility. Campaign messaging could tap into young women's deeper values and aspirations, making them think about their future and how their

decisions now can make an impact on their life. It could highlight novel CT information (i.e., side effects, asymptomatic nature, prevalence) that is motivating to women. Couching the messaging within a women's health framework would offer flexibility to address other women's health topics through the course of the campaign, if appropriate. Support materials should detail that CT is an STD to build on women's basic understanding that STDs and other common infections have negative health outcomes. However, STDs would not be the lead, as a direct focus on STDs and women may be perceived as stigmatizing to the target audience.

#### Audience

The primary target audience for option 1 is sexually active females ages 15–25 years.

Although women are the primary audience, the research recommends that the role of men in STD testing, including the effects of CT on men, the shared responsibility for STD testing in relationships and a need for men to be supportive of their partner's STD screening, should be referenced in materials focused on women. These recommendations derive from findings that (a) the absence of men in tested materials suggested to women that men do not get CT; and (b) language about women (only) needing annual testing was negatively received, perceived to promote a double-standard around sex and sexual health/responsibility.

For this reason, message dissemination channels and venues should be strategically selected to target women but should not specifically mention women when describing CT testing recommendations.

#### **Option 2: General STD Focus**

A general approach that normalizes testing behavior and drives women to seek testing may also be considered. This option recommends leading with STD messaging since "STD" is a familiar brand. Including portrayals of both men and women in the messaging would prevent the stigmatization of women. Materials could build upon the approach that inspires and empowers teenage and young adult women to think about their future. Supporting materials could either specifically discuss or allude to CT by focusing on potential consequences of CT. Testing recommendations could differentiate testing frequency for males and females, ensuring that messaging for males emphasizes their role in STD prevention, testing and treatment.

With carefully selected channels, settings, and models, this approach could ultimately result in increased CT testing among women, though it would rely heavily on a targeted approach. Moreover, it would be incumbent upon providers to know to test female patients for CT when they present asking for general STD testing. Given the myriad of identified challenges to CT testing at the provider level, this may require that campaign resources also be directed toward provider training. [See *Secondary Audiences*, below]

#### Audience

The target audience for this option is sexually active females and males ages 15–25 years, with a heavier focus on females. Although messaging will generally appeal to both female and male audiences, targeted activities will be geared to women.

Upon determination of the campaign approach (i.e., option 1, option 2, or a combination of both), CDC and its partners should engage in further discussion for consideration of a campaign name.

## 3) Secondary Audiences

Participants referenced two key audiences that should be addressed in a CT testing campaign. Developing educational materials for either/both audience(s) could support this campaign effort.

#### **Health care providers**

Health care providers were considered the gatekeepers to CT testing. Teenage and young adult women want providers to bring up the topic of STD testing or to create an environment where individuals feel comfortable bringing up the topic. Many participants did not know specific details about STD testing and/or that they need to ask for CT testing. Teens showed a stronger desire for materials or items that would help them start the conversation with a provider during their health visit than did young adult women, though interest levels were mixed overall. Teenage and young adult women generally wanted and expected the doctor to bring up STD testing if it was something they needed. While such tips may support some young women who want support resources, materials for health care providers should be promoted as well. These could include tips for starting the conversation about sexual health and STD testing with teenage and young adult women, sensitivity training, or resources to help them build clinic environments that are more conducive to such discussions.

#### Boys and young men

Regardless of option chosen, many participants felt that males needed to be included in an STD testing campaign, given that STDs affect both males and females. As the main goal of the campaign is to prevent infertility by promoting CDC's recommendation for annual screening of sexually active young women, materials could be developed for boys and young men to support this goal. Specifically, efforts could inform them about CT and encourage them to be tested and treated if their partner is diagnosed with CT. As part of broader sexual health promotion efforts, materials could also be developed to encourage STD counseling, prevention, and/or screening among men, as recommended by CDC and the U.S. Preventive Services Task Force (USPSTF).

## 4) Call to Action

It is suggested that the call to action focus on the general "get tested" message. To ensure that women know *what* they should "get tested" for, support materials and the campaign website must provide details about the need for CT screening. Messaging should give women cues to action to encourage them to get tested for CT (e.g., ask your doctor for a test, tell your doctor

you are sexually active, mention CT). Future testing could examine the benefits of a CT-specific call to action (e.g., get tested for chlamydia).

## 5) Potential Partners and Channels

Teenage and young adult women mentioned sources of CT and STD information, including CDC, Planned Parenthood, health clinics, schools, women's health organizations, community-based organizations, and NIH. When referring to video materials, MTV and BET were added to the list of sources. Teenage and young adult women are interested in receiving information through health care facilities (clinics, doctors' offices); schools; social networking sites like Facebook and Twitter; websites such as WebMD; magazines, especially women's, teen, and health magazines like *Seventeen*, *Cosmo Girl*, *Cosmopolitan*, *Allure*, *Glamour*, *Teen Ink*, *Vogue*, *Teen Vogue*, *Ebony*, *Jet*, *Essence*, *Us Weekly*, and *People*; television stations like MTV, BET, and VH1; outdoor advertising on buses, bus stops, and trains; and at community events. These suggested partners and media outlets should be leveraged and expanded to allow maximum reach through identified channels.

# B. Overarching Concept and Materials Development Recommendations

## 1) Messaging

Campaign materials (e.g., print, visual, audio) should build upon aspirational/empowering/emotional and light-hearted approaches. This could include messages that normalize testing and provide realistic testimonials. If materials are developed for teenagers, consideration should be given to messages that incorporate "college" humor or positive peer pressure.

- Aspirational/empowering/emotional concepts were popular across segments. Concepts that incorporated these approaches were considered "deep" and encouraged women to think about STDs. These concepts should include information that states that women can do little things now that can have a big impact on their lives. They were interested in approaches that connected to their values and aspirations.
- Light-hearted concepts were also popular across segments. Light-hearted approaches brought attention to materials while keeping the focus serious. These messages caught individuals' attention and encouraged them to read further.
- Approaches that normalized testing were popular across segments.
- Approaches that included realistic settings and situations in a 'reality show' format were also popular, as participants were able to identify with them. Teens and young adults liked the use of testimonials from people who have personal experience with the issue in PSAs.
- In addition to relatable testimonials from women like them, audiences wanted testimonials from people who are knowledgeable about the issue, such as doctors or

- health experts, either through PSAs or in-person presentations (e.g., health class presentations, health fairs, interviews on radio/television programs). These could offer viable approaches for national programming and local implementation/support.
- Teenage participants liked approaches that included "college" humor, while young adults found these approaches to be offensive or to suggest that CT does not need to be taken seriously.
- Teenagers also found more appeal in messaging about positive peer pressure than young adults, for whom peer pressure may be less of a concern.

Although participants did not have much preexisting knowledge of CT, they took the issue seriously. The materials should be written to connect with women while presenting the issue with straightforward information. Specific details about CT (including symptoms, consequences, and relatable, compelling statistics) should be included to gain audience attention and increase knowledge and perceived relevance (e.g., of having CT, of becoming infertile). This information should be brief so that it can be read quickly by audiences with short attention spans, and it should be accompanied by doable actionable steps.

Some participants noted that messaging would need to instill "fear" (e.g., of having an STD, of potential consequences) if it is to capture their attention and motivate action. However, fear appeals that use images of extreme symptoms would only serve to perpetuate STD-associated stigma and myths (CT usually causes no or minor symptoms), inhibiting STD testing. It may be that the prevalence of CT and the consequence of infertility are powerful enough to serve as motivators for many young women, particularly if they emphasize personally relevant and attention-getting statistics and are framed in meaningful terms that appeal to their deeper values. This information should be accompanied by simple and actionable information for audiences to take to prevent those consequences.

Participants are looking for messaging that is:

- Serious about CT. Participants disliked messages that suggested that CT is easy to deal with or that you do not need to worry about having CT. Participants believe that STDs are a serious matter. Information should convey that testing and treatment are easy, without minimizing the importance of CT or its health consequences.
- Actionable. Participants were interested in receiving simple and actionable steps and guidance to prevent undesired outcomes related to CT and STDs.
- Support resources to facilitate action. Teenage participants, but not young adult participants, were interested in communication tips related to talking with their sex partners and health care providers.
- Straightforward. Participants were not interested in adjectives or words that added unnecessary information or "filler."
- Easy to read. Participants did not want to spend a lot of time reading posters or internet content. They wanted to be able to see a message and grasp useful information.
- Definitive. Materials should stick to the facts and exclude information that has not been scientifically validated. Information about oral sex, which acknowledged that little is known about oral CT transmission or consequences, was not only disliked, but it discredited the information overall.

Participants wanted detailed materials to provide a number of factual details about CT including:

- Compelling, relatable statistics about CT prevalence
- Details of CT's asymptomatic nature
- Details of CT in men
- Outcomes of CT (e.g., permanent damage, infertility)
- The availability of free and confidential testing
- Signs and symptoms of CT
- Resources to get additional information (e.g., toll-free number, website)
- Resources to locate testing facilities

The materials that CDC pushes out to the audience (e.g., posters, print advertisements, web banners) should contain short messages that stick to key points. Three types of information have been identified as critical for capturing the audience's attention in such materials [Note that this does not provide specific language but the type of information to be included]:

- 1. CT is frequently asymptomatic. It can lead to infertility and other undesired health outcomes.
- 2. You are not automatically tested for CT, but you need to get tested to find out if you have CT
- 3. Free and confidential testing is available.

## 2) Language Preferences

Specific language preferences were provided by participants.

- Do not use the word "babies." A number of participants suggested changing "babies" to "kids" or "children" (e.g., "CT can prevent you from having 'kids' one day").
- In detailed content, use care in selection of scientifically correct versus informal terms. While some women were offended by the use of informal terms like "butt" and "pee," others were unfamiliar with words like "cervix," "douching," "discharge," and "pelvic exam." Website content should use plain language but avoid using informal terms that may threaten credibility, and provide hotlinks for definitions to medical or biological terms
- Consider empowering phrases (such as "Knowing is everything" or "I Know") in materials, if appropriate. Such phrasing was received positively during the review of logos, though they needed contextualizing information to be relevant.
- Reconsider language to describe screening recommendations.
  - Language referring to "sexually active" women requiring CT screening was considered offensive to some, suggesting that a woman is promiscuous if she is having sex. Language that does not specify women only in the recommendation might be better received; this specification may not be necessary if the information is well targeted. Wording could state: "If you are 25 or younger and sexually active." This may require a hotlink defining 'sexually active' since young women may have different conceptions of what this entails.

- Language about older women (>25 years) "with multiple sex partners" needing to get tested was also considered offensive. More appropriate language could include "if you are older than 25 and have had a new sex partner in the last year."
- The phrase "steady boyfriend" excluded same-sex couples and was identified by some as inappropriate. To be more inclusive, it should be replaced with content that refers to individuals in committed relationships.

Across materials, several pieces of content should be clarified:

- Outcomes of CT. Participants wanted an explanation of the other "serious health problems" that are caused by CT. Information could include more details about PID and/or explicit messaging about severe pelvic pain, to focus on more immediate and unwanted outcomes for those who are not concerned about longer term infertility.
- Length of time required for CT to result in infertility. Individuals were generally unclear about how long it takes for CT to cause infertility. Some had the impression that it would develop soon after an individual acquires CT. Information does not need to go into detail, but general information about the timeline within which CT may progress to infertility would be helpful.
- Frequency of testing. Participant confusion about the progression from CT to infertility led some to question whether annual testing for CT was enough, particularly if a woman has a new sex partner after getting tested. Information could clarify that women need to be tested annually, or after each new sex partner.
- Details about CT in men. Women were surprised by a lack of information about CT in men. This lack of information made some assume that men do not get CT.
- Prevention Information. Details about prevention could be incorporated into content and, if appropriate, into print materials. The phrase that condoms should be used "the right way" was unclear and should be clarified.
- An explanation of how CT can facilitate HIV transmission should be provided. Participants were surprised to learn that CT can make it easier to acquire HIV and did not find the explanation provided useful.

# 3) Design Elements

Participants would like the materials to include:

- Bright colors. Bright colors were liked by participants while neutral colors were frequently considered "dull."
- Familiar situations/settings. Contexts in which participants have been or could imagine themselves were preferred. Schools, cafés, doctors' offices, parties, and concerts were some familiar settings mentioned.
- Social situations that normalize testing. Scenarios illustrating that everyone gets tested for STDs (*Café* concept) were effective and well received by young women
- Diverse imagery. Models should represent a broad diversity of ages and racial/ethnic groups to be relevant to target audiences and avoid stigmatizing any one group. Age and race/ethnicity of the models was a strong factor in whether participants perceived

materials to be relevant. Models should also include men (of various ages, races/ethnic groups) so as not to stigmatize women.

 Materials could present a variety of races/ethnicities and ages in one poster or materials could be created for each audience.

## C. Recommendations for Developing Specific Materials

## 1) Concepts

Two concepts, *The woman you want to be,* which used emotional appeals that tapped into participants' deeper values and aspirations, and *Café*, which used a light-hearted approach that frames testing as normative behavior, resonated best with the audiences. Both of these concepts were attention getting and motivating for teenage and young adult participants, and both could move the issue forward.

- The woman you want to be appealed to women's focus on the future and their desire to imagine what life has in store for them. This concept provided information that got them thinking about CT.
- *Café* resonated with teenagers and young adults for a different reason. This concept dealt with stigma and attempted to normalize the behavior.

It is recommended that *The woman you want to be* be developed as the campaign theme. However, there is potential for the development of *Café* as a secondary concept or materials for partners that speak to the larger STD issue and the normalization of STD testing behavior.

These two posters were created as concepts for testing. Careful consideration should be made when creating final products based on these concepts.

*The woman you want to be* could be improved by:

- Including more racial/ethnic diversity in the images
- Simplifying layout of "Make sure the woman you become" to make it easier to read, possibly by reducing the visual distractions in the boxes or more clearly separating the words from the images
- Replacing the African American woman sitting at a computer with a woman in a professional leadership role
- Increase size of text box to allow for a larger font or decrease the amount of text in the text box

The *Café* poster could be improved by:

- Choosing a setting that is relevant to both teenagers and young women, possibly a sporting event or concert
  - o Teenagers were interested in a school setting
- Including more age and racial/ethnic diversity in the images

• Revising the labels to illustrate more clearly that they are in fact labels (rather than conversation or thought bubbles). The use of hand-drawn arrows pointing to individuals could be considered.

#### 2) Calls to action

Both "No symptoms is no excuse. Get tested." and "Get informed. Get tested." resonated because of the clear, succinct message of "get tested." We recommend the use of "Get informed. Get tested." since it provides clues to the desired behavior and suggests that there is more to be learned about CT. "No symptoms is no excuse" provides specific information that is relevant to the campaign and may be compelling to audiences in campaign materials. Although "Get informed. Get tested." is recommended at this time, the call to action may change at different points of the campaign.

## 3) Logos

Participants showed a preference for logos that clearly communicated the intended behavior (STD testing), both visually and verbally. Although three logos "Get tested," "Knowing is everything," and "Check it" were popular, "Get tested" was the most popular overall. "Get tested" is the recommended logo because it states the intended behavior, uses imagery to suggest what you need to be tested for, and uses a visual that appeals to our target audience. Other combinations of wording and images may be explored and considered for testing. If the logo uses an acronym, its meaning should be spelled out as part of the logo, at least until the campaign achieves broad recognition by intended audiences. Caution should be taken to ensure that images and words are relevant and believable to audiences, speaking their language, without appearing disingenuous.

# 4) Public Service Announcements

Participants are interested in viewing PSAs about CT and STDs. A few mentioned that they would expect to see such PSAs on channels that address STD and HIV testing, such as MTV or BET.

Feedback on the use of celebrities was mixed. Participants stated that celebrities are attentiongetting, but not necessarily motivating.

If PSAs are created for young women, development should consider:

- Using light-hearted humor
- Using emotional appeals, including references of love and relationships
- Depicting situations in which participants could imagine themselves
  - o Situations could be targeted by age segment
- Personal testimonials from real people that audiences can relate to
- Focusing on women but including or referencing men, especially through relationships (e.g., as supportive partners)
- Providing details or resources for viewers (e.g., website or SMS code linking them to services)

#### PSAs should not:

- Be too short (under 20 seconds)
- Include fast dialogue
- Include "cheesy" or "distasteful" humor

## 5) Brochure/Factsheet Content

Participants are interested in receiving content through brochures, websites, and newspapers. Magazines were mentioned for the placement of poster content, and could also be used for repurposing excerpts of the tested brochure content (e.g., inclusion in magazine articles, websites, or new media). We recommend moving forward with brochures for dissemination through provider offices or other on-the-ground efforts.

#### Basic Information

The basic information content provided useful information. Participants liked the content and suggested adding:

- Additional statistics
- Details about the impact of CT on men
- Details about CT in same-sex relationships

Participants suggested removing vague details about oral sex and the message about abstinence.

## "Talking to your partner" content

This content was considered useful by teenage participants. It should be included on the website or on materials that are specifically developed for this segment. This content could be improved by eliminating redundancy (e.g., reminders that individuals need to be tested) and adding

additional tips for communicating with partners. The campaign could consider bundling these tips with tips for a broader discussion about condom use.

#### "Talking to your doctor" content

This content was considered important, particularly for teenage segments, but was not necessary for all individuals. The inclusion of additional tips would be helpful (e.g., bundle asking for a test with other general tests like blood pressure or cholesterol). Some, but not all, participants were interested in the idea of materials designed to be printed and given to their doctor in place of having a conversation.

## 6) Interactive Website Components

An interactive website should include any or all of the following: a clinic locator, frequently asked questions (FAQs), personal testimonies, blogs, chat rooms, quizzes, polls, inspirational quotes, public service announcements/videos, opportunities to chat with or submit a question to a health professional, and a hotline to contact for more information. The website should not include games.

#### D. Other Recommendations

## 1) Online Testing Kits

Online testing kits could be a viable and valuable component of a social marketing campaign. Marketing efforts will be critical to assure women of the confidentiality, reliability and validity of results, as well as the expected waiting period for receiving test kits and results. To increase perceived self-efficacy, explicit directions about specimen collection should be provided, along with assurance that collection is easy and requires no prior experience. Finally, packaging should be generic and unlabeled, and additional information and support should be made available online or by phone.